Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTANXR1625

PASSWORD:
* * * * * * RECONNECTED TO STN INTERNATIONAL * * * * * *
SESSION RESUMED IN FILE 'CAPLUS' AT 16:27:47 ON 30 JAN 2008
FILE 'CAPLUS' ENTERED AT 16:27:47 ON 30 JAN 2008
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.96	1.17

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.96	1.17

FILE 'CAPLUS' ENTERED AT 16:27:56 ON 30 JAN 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1907 - 30 Jan 2008 VOL 148 ISS 5
FILE LAST UPDATED: 29 Jan 2008 (20080129/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

```
=> s CCR5
L1        5200 CCR5

=> s l1 and mediat?
         690907 MEDIAT?
L2         1204 L1 AND MEDIAT?

=> s l2 and inflammator?
         196066 INFLAMMATOR?
L3          449 L2 AND INFLAMMATOR?

=> s l3 and asthma
          38209 ASTHMA
             22 ASTHMAS
          38217 ASTHMA
                  (ASTHMA OR ASTHMAS)
L4           48 L3 AND ASTHMA
```

```
=> s l4 and py<2002
      21937588 PY<2002
L5             7 L4 AND PY<2002

=> d ibib abs hitstr tot
```

L5 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:413997 CAPLUS
DOCUMENT NUMBER: 139:5650
TITLE: Human G-protein chemokine receptor (CCR5) HDGNR10, polynucleotides and antibodies for diagnosis, prognosis and therapy of cancer, infection, inflammation, autoimmune and neurodegenerative diseases
INVENTOR(S): Roschke, Viktor; Rosen, Craig A.; Ruben, Steven M.
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 196 pp., Cont.-in-part of Appl. No. PCT/US01/04153.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003100058	A1	20030529	US 2002-67800	20020208
US 7175988	B2	20070213		
WO 2001058916	A2	20010816	WO 2001-US4153	20010209
<--				
WO 2001058916	A3	20020418		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002061834	A1	20020523	US 2001-779880	20010209
US 2005154193	A1	20050714	US 2004-994679	20041123
US 2006111559	A2	20060525		

PRIORITY APPLN. INFO.: US 2001-779880 A2 20010209
WO 2001-US4153 A2 20010209
US 2001-297257P P 20010612
US 2001-310458P P 20010808
US 2001-328447P P 20011012
US 2001-341725P P 20011221
US 2000-181258P P 20000209
US 2000-187999P P 20000309
US 2000-234336P P 20000922
US 2002-67800 A3 20020208

AB The present invention relates to a novel human protein called human G-protein chemokine receptor (CCR5) HDGNR10, and isolated polynucleotides encoding this protein. The invention is also directed to human antibodies that bind human G-protein chemokine receptor (CCR5) HDGNR10 and to polynucleotides encoding those antibodies. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human G-protein chemokine receptor (CCR5) HDGNR10 and human anti-human G-protein chemokine receptor (CCR5) HDGNR10 antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to this novel human protein and these novel human antibodies.

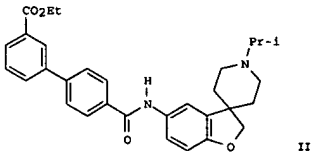
REFERENCE COUNT: 353 THERE ARE 353 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:661253 CAPLUS
DOCUMENT NUMBER: 135:226886
TITLE: Preparation of N-(spiro[benzofuran-3(2H),4'-piperidin]-5-yl)-1,1'-biphenyl-4-carboxamides for treating a CCR5-mediated diseases
INVENTOR(S): Bondinell, William E.; Ku, Thomas W.
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001064213	A1	20010907	WO 2001-US6837	20010302
<--				
W: AE, AL, AU, BA, BB, BG, BR, BZ, CA, CN, CO, CZ, DE, EE, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, MZ, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, TZ, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2000-186418P P 20000302

OTHER SOURCE(S): MARPAT 135:226886
GI



II

AB The title benzanilides ArAE [I; Ar = (un)substituted biphenyl, Ph; A = CONR, NHCO, CH2NH; R = H, alkyl; E = spiro[benzofuran-3(2H),4'-piperidin]-5-yl, etc.] which are modulators, agonists or antagonists of the CCR5 receptor, were prepared E.g., a multi-step synthesis of the compound II.CF3CO2H, was given. The compds. I showed CCR5 receptor modulator activity having IC50 values in the range of 0.0001-100 μM. In addition, this invention relates to the treatment and prevention of disease states mediated by CCR5, including, but not limited to, asthma and atopic disorders (for example, atopic dermatitis and allergies), rheumatoid arthritis, sarcoidosis, or idiopathic pulmonary fibrosis and other fibrotic diseases, atherosclerosis, psoriasis, autoimmune diseases such as multiple sclerosis, treating and/or preventing rejection of transplanted organs, and inflammatory bowel disease, all in mammals, by the use of substituted benzanilides which are CCR5 receptor antagonists. Furthermore, since CD8+ T cells have been implicated in COPD, CCR5 may play a role in their recruitment and therefore antagonists to CCR5 could provide potential therapeutic use in the treatment of COPD. Also, since CCR5 is a co-receptor for the entry of HIV into cells, selective receptor modulators may be useful in the treatment of HIV infection.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:756484 CAPLUS
DOCUMENT NUMBER: 133:329593
TITLE: Low adenosine anti-sense oligonucleotide, compositions, kit and method for treatment of airway disorders associated with bronchoconstriction, lung inflammation, allergy(ies) and surfactant depletion
INVENTOR(S): Nyce, Jonathan W.
PATENT ASSIGNEE(S): East Carolina University, USA
SOURCE: PCT Int. Appl., 1592 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 8
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000062736	A2	20001026	WO 2000-US8020	20000324
WO 2000062736	A3	20011011		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2330022	A1	20001026	CA 2000-2330022	20000324
BR 2000006019	A	20010313	BR 2000-6019	20000324
EP 1168919	A2	20020109	EP 2000-919668	20000324
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2003515525	T	20030507	JP 2000-611873	20000324
MX 2000PA12093	A	20010521	MX 2000-PA12093	20001206
AU 200250710	A	20020808	AU 2002-50710	20020628
PRIORITY APPLN. INFO.:			US 1999-127958P	P 19990406
			WO 2000-US8020	W 20000324
			AU 2000-71749	A3 20001122

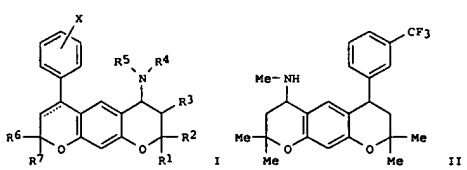
OTHER SOURCE(S): MARPAT 133:329593
AB An in vivo method of selectively delivering a nucleic acid to a target gene or mRNA, comprises the topical administration, e.g. to the respiratory system, of a subject of a therapeutic amount of an oligonucleotide (oligo) that is antisense to the initiation codon region, the coding region, the 5' or 3' intron-exon junctions or regions within 2 to 10 nucleotides of the junctions of the gene or antisense to a mRNA complementary to the gene in an amount effective to reach the target polynucleotide and reducing or inhibiting expression. In addition a method of treating an adenosine-mediated effect comprises topically administering to a subject an antisense oligo in an amount effective to treat the respiratory, pulmonary, or airway disease. In order to minimize triggering adenosine receptors by their metabolism, the administered oligos have a low content of or are essentially free of adenosine. A pharmaceutical compn. and formulations comprise the oligo antisense to an adenosine receptor, genes and mRNAs encoding them, genomic and mRNA flanking regions, intron and exon borders and all regulatory and functionally related segments of the genes and mRNAs encoding the polypeptides, their salts and mixts. Various formulations contain a requisite carrier, and optionally other additives and biol. active agents.

The low-adenosine or adenosine-free (des-A) agent for practicing the method of the invention may be prepd. by selecting a target gene(s), genomic flanking region(s), RNA(s) and/or polypeptide(s) assocd. with a disease(s) or condition(s) afflicting lung airways, obtaining the sequence of the mRNA(s) corresponding to the target gene(s) and/or genomic flanking region(s), and/or RNAs encoding the target polypeptide(s), selecting at least one segment of the mRNA which may be up to 60 % free of thymidine (T) and synthesizing one or more anti-sense oligonucleotide(s) to the mRNA segments which are free of adenosine (A) by substituting a universal base for A when present in the oligonucleotide. The agent may be prepd. by selection of target nucleic acid sequences with GC running stretches, which have low T content, and by optionally replacing A in the antisense oligonucleotides with a "Universal or alternative base". The agent, compn. and formulations are used for prophylactic, preventive and therapeutic treatment of ailments assocd. with impaired respiration, lung allergy(ies) and/or inflammation and depletion lung surfactant or surfactant hypoprodn., such as pulmonary vasoconstriction, inflammation, allergies, allergic rhinitis, asthma, impeded respiration, lung pain, cystic fibrosis, bronchoconstriction. The present treatment is suitable for administration in combination with other treatments, e.g. before, during and after other treatments, including radiation, chemotherapy, antibody therapy and surgery, among others. Alternatively, the present agent is effectively administered prophylactically or therapeutically by itself for conditions without known therapies or as a substitute for therapies exhibiting undesirable side effects. The treatment of this invention may be administered directly into the respiratory system of a subject so that the agent has direct access to the lungs, or by other effective routes of administration, e.g. topically, transdermally, by implantation, etc., in an amt. effective to reduce or inhibit the symptoms of the ailment.

L5 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:645845 CAPLUS
DOCUMENT NUMBER: 133:222719
TITLE: Preparation of substituted benzo[1,2-b:5,4-b']dipyran-4-amines as CCR5 receptor modulators
INVENTOR(S): Blaney, Frank E.; Bondinell, William E.; Chan, James A.
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA; Smithkline Beecham Plc
SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000053175	A1	20000914	WO 2000-US6210	20000310
W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CZ, EE, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, TZ, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1156801	A1	20011128	EP 2000-913848	20000310
EP 1156801	B1	20040707		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002538203	T	20021112	JP 2000-603664	20000310
AT 270547	T	20040715	AT 2000-913848	20000310
ES 2223481	T3	20050301	ES 2000-913848	20000310
US 6506790	B1	20030114	US 2001-914502	20010829
PRIORITY APPLN. INFO.:			US 1999-123607P	P 19990310
			WO 2000-US6210	W 20000310

OTHER SOURCE(S): MARPAT 133:222719
GI



AB The title compds. (I) [wherein R1, R2, R4, R6, and R7 = independently H or alkyl; R3 = H or OH; R5 = H or (cyclo)alkyl; or NR4R5 = a 5-, 6-, or 7-membered heterocyclic ring; X = H or one or more (cyclo)alkyl, (cyclo)alkenyl, alkynyl, aralkyl, aryl, CH2NR9R10, CH2OR11, COR11, CONR9R10, CO2R11, CN, CF3, NR9R10, NR9COR11, NR9CONR9R10, NO2, OH, alkoxy, acyloxy, etc.; R9 and R10 = independently H, (ar)alkyl, or aryl; or NR9R10 = a 5- or 6-membered heterocyclic ring; R11 = H, (ar)alkyl, aryl, or CF3] were prepd. as modulators of the CC chemokine receptor CC-CKR5 (CCR5). Thus, II was synthesized in a 6-step sequence involving (1) cycloaddn. of 3,3-dimethylacrylic acid to resorcinol using H2SO4 to give the 7-hydroxy-2,2-dimethylchromanone, (2) benzyl protection of the hydroxy group, (3) Grignard addn. of 3-BrC6H4CF3 to form the chromene, (4) redn. and deprotection using Pd/C, (5) cycloaddn. of 3,3-dimethylacrylic acid using BF3 etherate to give the benzodipyranone, and (6) conversion to the benzodipyranamine with MeNH2 in the presence of TiCl4. I show CCR5 receptor modulator activity with IC50 values ranging from 0.0001 μM to 100 μM. I are useful in the treatment and prevention of disease states mediated by CCR5, including asthma and atopic disorders (e.g., atopic dermatitis and allergies), rheumatoid arthritis, sarcoidosis and other fibrotic diseases, atherosclerosis, psoriasis, autoimmune diseases such as multiple sclerosis, and inflammatory bowel disease. Since CD8+ T cells have been implicated in COPD and CCR5 plays a role in their recruitment, I are also expected to be therapeutic agents for the treatment of COPD. In addn., as modulators of the CCR5 receptor, which is a co-receptor for the entry of HIV into cells, I may be useful in the treatment of HIV infection.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:513446 CAPLUS
DOCUMENT NUMBER: 133:129863
TITLE: Heterocyclic compound modulators of the CCR5 receptor, preparation thereof, and therapeutic use
INVENTOR(S): Bondinell, William E.; Neeb, Michael J.
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA
SOURCE: PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000042852	A1	20000727	WO 2000-US1908	20000125
W: AE, AL, AU, BA, BB, BG, BR, CA, CN, CZ, EE, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1146790	A1	20011024	EP 2000-909984	20000125
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002535256	T	20021022	JP 2000-594326	20000125
PRIORITY APPLN. INFO.:			US 1999-117044P	P 19990125
			WO 2000-US1908	W 20000125

OTHER SOURCE(S): MARPAT 133:129863
AB Substituted heterocyclic compds. are provided which are modulators, agonists or antagonists of the CCR5 receptor. Also disclosed is the treatment and prevention of disease states mediated by CCR5, including, but no limited to, asthma and atopic disorders (for example, atopic dermatitis and allergies), rheumatoid arthritis, sarcoidosis and other fibrotic diseases, atherosclerosis, psoriasis, autoimmune diseases such as multiple sclerosis, and inflammatory bowel disease, all in mammals, by the use of substituted heterocyclic compds. which are CCR5 receptor antagonists. Furthermore, since CD8+ T cells have been implicated in COPD, CCR5 may play a role in their recruitment and therefore antagonists to CCR5 could provide potential therapeutic in the treatment of COPD. Also, since CCR5 is a co-receptor for the entry of HIV into cells, selective receptor modulators may be useful in the treatment of HIV infection.
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:475535 CAPLUS
DOCUMENT NUMBER: 133:99557
TITLE: Substituted benzanilides, their preparation, and their use as CCR5 receptor modulators
INVENTOR(S): Bondinell, William E.; Ku, Thomas W.; Wang, Ning
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA
SOURCE: PCT Int. Appl., 37 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

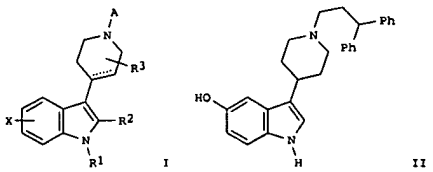
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000040239	A1	20000713	WO 1999-US30888	19991228
W: CA, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1140072	A1	20011010	EP 1999-967619	19991228
EP 1140072	B1	20040414		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2002534383	T	20021015	JP 2000-591996	19991228
AT 264100	T	20040415	AT 1999-967619	19991228
ES 2219104	T3	20041116	ES 1999-967619	19991228
PRIORITY APPLN. INFO.:			US 1998-114239P	P 19981230
			US 1999-128010P	P 19990406
			WO 1999-US30888	W 19991228

AB Substituted benzanilides are provided which are modulators, agonists or antagonists, of the CCR5 receptor. In addition, the invention relates to the treatment and prevention of disease states mediated by CCR5, including, but not limited to, asthma and atopic disorders (for example, atopic dermatitis and allergies), rheumatoid arthritis, sarcoidosis and other fibrotic diseases, atherosclerosis, psoriasis, autoimmune diseases such as multiple sclerosis, and inflammatory bowel disease, all in mammals, by the use of substituted benzanilides which are CCR5 receptor antagonists. Furthermore, since CD8+ T cells have been implicated in COPD, CCR5 may play a role in their recruitment and therefore antagonists to CCR5 could provide potential therapeutic in the treatment of COPD. Also, since CCR5 is a co-receptor for the entry of HIV into cells, selective receptor modulators may be useful in the treatment of HIV infection.
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:249078 CAPLUS
DOCUMENT NUMBER: 130:281994
TITLE: Preparation of 3-(4-piperidinyl or 1,2,3,6-tetrahydro-4-pyridinyl)-1H-indol-5-ols for treating a CCR5-mediated diseases
INVENTOR(S): Bondinell, William E.; Chan, James; Porter, Roderick A.
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA; Smithkline Beecham Plc
SOURCE: PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9917773	A1	19990415	WO 1998-US21125	19981007
W: AL, AU, BA, BB, BG, BR, CA, CN, CZ, EE, GE, HU, ID, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
ZA 9809083	A	19990407	ZA 1998-9083	19981006
CA 2305805	A1	19990415	CA 1998-2305805	19981007
AU 9897901	A	19990427	AU 1998-97901	19981007
EP 1037635	A1	20000927	EP 1998-952132	19981007
R: BE, CH, DE, ES, FR, GB, IT, LI, NL				
JP 2001518505	T	20011016	JP 2000-514644	19981007
US 6476028	B1	20021105	US 2000-529338	20000808
PRIORITY APPLN. INFO.:			US 1997-61217P	P 19971007
			WO 1998-US21125	W 19981007

OTHER SOURCE(S): MARPAT 130:281994
GI



L5 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

AB The title compds. [I; X = H, alkyl, CF3, etc.; R1-R3 = H, alkyl; A = [C(R'')2]mCR''R4R5, [C(R'')2]nCR'':CR4R5; R'' = H, alkyl; m = 0-3; n = 1-2; R4 = Ph, biphenyl, naphthyl, etc.; R5 = R'', Ph, naphthyl] which are modulators, agonists or antagonists, of the CCR5 receptor, were prepared E.g., a 3-step synthesis of the title compound II, starting with 5-benzyloxyindole and 1-benzyl-4-piperidone, was given. Compds. I show CCR5 receptor modulator activity having IC50 of 0.0001-100 μM. In addition, this invention relates to the treatment and prevention of disease states mediated by CCR5, including, but not limited to, asthma and atopic disorders (for example, atopic dermatitis and allergies), rheumatoid arthritis, sarcoidosis and other fibrotic diseases, atherosclerosis, psoriasis, autoimmune diseases such as multiple sclerosis, and inflammatory bowel disease, all in mammals, by the use of substituted 3-(4-piperidinyl)indoles which are CCR5 receptor modulators. Furthermore, since CD8+ T cells have been implicated in Chronic Obstructive Pulmonary Disease ("COPD"), CCR5 may play a role in their recruitment and therefore antagonists to CCR5 could provide potential therapeutic in the treatment of COPD. Also, since CCR5 is a co-receptor for the entry of Human Immunodeficiency Virus ("HIV") into cells, receptor modulators may be useful in the treatment of HIV infection.
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
=> d his

     (FILE 'HOME' ENTERED AT 16:26:01 ON 30 JAN 2008)

     FILE 'CAPLUS' ENTERED AT 16:26:25 ON 30 JAN 2008

     FILE 'CAPLUS' ENTERED AT 16:27:56 ON 30 JAN 2008
L1          5200 S CCR5
L2          1204 S L1 AND MEDIAT?
L3           449 S L2 AND INFLAMMATOR?
L4            48 S L3 AND ASTHMA
L5             7 S L4 AND PY<2002

=> s l3 and py<2002
      21937588 PY<2002
L6          154 L3 AND PY<2002

=> d ibib abs hitstr 1-20
```

L6 ANSWER 1 OF 154 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:413997 CAPLUS
DOCUMENT NUMBER: 139:5650
TITLE: Human G-protein chemokine receptor (CCR5) HDGNR10, polynucleotides and antibodies for diagnosis, prognosis and therapy of cancer, infection, inflammation, autoimmune and neurodegenerative diseases
INVENTOR(S): Roschke, Viktor; Rosen, Craig A.; Ruben, Steven M.
PATENT ASSIGNEE(S): Human Genome Sciences, Inc., USA
SOURCE: U.S. Pat. Appl. Publ., 196 pp., Cont.-in-part of Appl. No. PCT/US01/04153.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003100058	A1	20030529	US 2002-67800	20020208
US 7175988	B2	20070213		
WO 2001058916	A2	20010816	WO 2001-US4153	20010209
<--				
WO 2001058916	A3	20020418		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002061834	A1	20020523	US 2001-779880	20010209
US 2005154193	A1	20050714	US 2004-994679	20041123
US 2006111559	A2	20060525		
PRIORITY APPLN. INFO.:			US 2001-779880 A2	20010209
			WO 2001-US4153 A2	20010209
			US 2001-297257P P	20010612
			US 2001-310458P P	20010808
			US 2001-328447P P	20011012
			US 2001-341725P P	20011221
			US 2000-181258P P	20000209
			US 2000-187999P P	20000309
			US 2000-234336P P	20000922
			US 2002-67800 A3	20020208

AB The present invention relates to a novel human protein called human G-protein chemokine receptor (CCR5) HDGNR10, and isolated

L6 ANSWER 1 OF 154 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
polynucleotides encoding this protein. The invention is also directed to human antibodies that bind human G-protein chemokine receptor (CCR5) HDGNR10 and to polynucleotides encoding those antibodies. Also provided are vectors, host cells, antibodies, and recombinant methods for producing human G-protein chemokine receptor (CCR5) HDGNR10 and human anti-human G-protein chemokine receptor (CCR5) HDGNR10 antibodies. The invention further relates to diagnostic and therapeutic methods useful for diagnosing and treating diseases, disorders, and/or conditions related to this novel human protein and these novel human antibodies.
REFERENCE COUNT: 353 THERE ARE 353 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 154 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:199452 CAPLUS
DOCUMENT NUMBER: 138:198582
TITLE: Chemokine receptor CCR-interacting MIP-1α peptide and its use in treatment of HIV infections
INVENTOR(S): Albini, Adriana; Noonan, Douglas; Benelli, Roberto; Giunciuglio, Daniela
PATENT ASSIGNEE(S): Istituto Nazionale per la Ricerca sul Cancro, Italy
SOURCE: Ital. Appl., 18 pp.
CODEN: ITXXCZ
DOCUMENT TYPE: Patent
LANGUAGE: Italian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IT 98MI1189	A1	19991129	IT 1998-MI1189	19980529
<--				
PRIORITY APPLN. INFO.:			IT 1998-MI1189	19980529

AB The title MIP-1α peptides, especially PTACCFSYTSRQIPQNFIADYFETSS (I), which bind to chemokine receptors CCR, can be used to treat HIV infections. Thus, I was found to be a chemoattractant for monocytes and to stimulate Ca2+ transport in these cells. I inhibited HIV-1 and HIV-2 infection mediated by CXCR4, CCR5, and CCR3 as well as CCR-2b, BOB, BONZO, and V-28.

L6 ANSWER 3 OF 154 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:889387 CAPLUS
DOCUMENT NUMBER: 137:346141
TITLE: Anti-viral and chemokine CCR5 receptor-mediated diseases treatment with pertussis toxin B oligomer
INVENTOR(S): Bukrinsky, Michael; Alfano, Massimo
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 31 pp., Cont.-in-part of U.S. 6,019,979.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002172687	A1	20021121	US 2000-494964	20000131
US 6019979	A	20000201	US 1997-911879	19970815
<--				
PRIORITY APPLN. INFO.:			US 1997-911879 A2	19970815

AB There is disclosed a method for anti-viral therapy, and for decreasing infectivity of viruses that use the chemokine CCR5 receptor as a co-receptor by treatment with the Bordetella pertussis toxin (PTX) B oligomer, wherein the PTX B oligomer is composed of from two to ten subunits of PTX B oligomer selected from the group consisting of S2, S3, S4, S5, and combinations thereof. Examples of the present invention indicate that the PTX B oligomer cross-deactivated CCR5 and impaired its function as a co-receptor for HIV-1.

L6 ANSWER 4 OF 154 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:638798 CAPLUS
DOCUMENT NUMBER: 138:180552
TITLE: Effect of cocaine on chemokine and CCR-5 gene expression by mononuclear cells from normal donors and HIV-1 infected patients
AUTHOR(S): Nair, Madhavan P. N.; Mahajan, Supriya; Chadha, Kailash C.; Nair, Narayanan M.; Hewitt, Ross G.; Pillai, Santosh K.; Chadha, Priya; Sukumaran, Prathibha C.; Schwartz, Stanley A.
CORPORATE SOURCE: Buffalo General Hospital, State University of New York at Buffalo at the Buffalo General Hospital, Buffalo, NY, 14203, USA
SOURCE: Advances in Experimental Medicine and Biology (2001), 493(Neuroimmune Circuits, Drugs of Abuse, and Infectious Diseases), 235-240
CODEN: AEMBAP; ISSN: 0065-2598
PUBLISHER: Kluwer Academic/Plenum Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Several studies have described the association of cocaine use with susceptibility to and progression of HIV-1 infections. The authors hypothesize that cocaine can mediate these pathol. effects through modulation of HIV suppressing chemokine and their receptors. The present study examines the effect of cocaine on MIP-1β synthesis by lymphocytes from normal and HIV infected subjects and MIP-1β and CCR5 gene expression by normal PBMC. The results demonstrate that cocaine selectively suppresses LPS-induced β chemokine production by lymphocytes from HIV infected patients and it modulates the expression of MIP-1β and CCR5 gene expression by PBMC.
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 154 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:102086 CAPLUS
DOCUMENT NUMBER: 136:308358
TITLE: Upregulation of Decidual P-Selectin Expression Is Associated with an Increased Number of Th1 Cell Populations in Patients Suffering from Spontaneous Abortions
AUTHOR(S): Zenclussen, Ana Claudia; Fest, Stefan; Sehmsdorf, Ute-Stephani; Hagen, Evelin; Klapp, Burghard F.; Arck, Petra Clara
CORPORATE SOURCE: Department of Medicine, Charite, Humboldt University, Berlin, Germany
SOURCE: Cellular Immunology (2001), 213(2), 94-103
CODEN: CLIMB8; ISSN: 0008-8749
PUBLISHER: Academic Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A multi-cascade of leukocyte-endothelial cell interactions is involved in the trafficking of inflammatory lymphocytes into tissue. The primary contact between leukocytes and endothelium is mediated by selectins. Ligands for P-Selectin are preferentially expressed on Th1 cells and thereby allow migration of these inflammatory cells through the vessel wall. Since a peripheral and local Th1-type cytokine profile is present in spontaneous human abortion (SA), opposed by a Th2 dominant situation in normal pregnancies (NP), the authors investigated (1) the phenotype of peripheral Th1 cells by flow cytometry, as well as the Th1-type cytokine levels by ELISA, (2) the decidual expression of P- and E-Selectin by immunohistochem. (IHC), and (3) the phenotype of decidual immunocompetent cells by IHC in patients with NP or SA. The authors observed enhanced production of IFN-γ and TNF-α in CD8+, CD3+, and CD56+ blood cells, as well as an increase in the number of CCR5+ cells in patients suffering from SA compared to those with NP. No difference was detectable with respect to the serum levels of the two cytokines. Using IHC methods, the authors observed increased staining intensity of P-Selectin+ vessels in samples of SA patients. E-Selectin was only weakly expressed in decidual endothelial cells, with no difference between NP and SA. In SA samples, E-Selectin+ stromal cells were exclusively present. The authors further detected increased nos. of decidual CD8+, CD3+, CCR5+, and CD56+ cells in SA patients. The authors propose that Th1 lymphocyte migration into decidua is enhanced in SA due to upregulated P-Selectin expression in decidual vessels. This increase of Th1-producing lymphocytes might be involved in the rejection of trophoblasts. (c) 2001 Academic Press.
REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 154 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:74950 CAPLUS
DOCUMENT NUMBER: 137:46006
TITLE: Differential expression of chemokines and chemokine receptors shapes the inflammatory response in rejecting human liver transplants
AUTHOR(S): Goddard, Sarah; Williams, Ann; Morland, Clare; Qin, Shixin; Gladue, Ron; Hubscher, Stefan G.; Adams, David H.
CORPORATE SOURCE: Liver Research Laboratories, MRC Centre for Immune Regulation, University of Birmingham, UK
SOURCE: Transplantation (2001), 72(12), 1957-1967
CODEN: TRPLAU; ISSN: 0041-1337
PUBLISHER: Lippincott Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Graft rejection after liver transplantation is associated with a lymphocytic infiltrate, the nature of which will be determined by, among various factors, the local activity of chemokines that attract particular subsets of effector cells to the graft. The expression of chemokines and receptors in human liver allografts was studied by immunohistochem. of tissue and flow cytometry of blood and liver-derived lymphocytes. Receptor function was assessed with in vitro chemotaxis. We report increased expression of chemokine receptors CXCR3, CXCR4, and CCR5 on circulating and graft-infiltrating lymphocytes after liver transplantation. Liver-derived T cells responded to the ligands for these receptors in vitro, which suggests that the receptors are functionally active. The chemokine ligands for these receptors were detected in rejecting allografts. CXCR3 ligands interferon-inducible protein 10 and monokine-induced by γ interferon were detected on sinusoidal endothelium and interferon-inducible T-cell α chemoattractant was detected on portal and hepatic vascular endothelium, whereas the CXCR4 ligand, stromal-derived factor (SDF), was restricted to biliary epithelium. CCR5 ligands have previously been shown on portal endothelium. An in vitro model of T-cell alloactivation demonstrated a similar pattern of expression of functional CXCR3, CXCR4, and CCR5 on T cells. Increased expression of chemokine receptors, especially CCR3 and CCR5, was associated with redistribution of activated Kupffer cells in rejecting grafts. The patterns of chemokine expression in liver allografts during rejection suggest that the recruitment and positioning of lymphocytes is mediated by specific chemokines. Although ligands for the receptors CXCR3 and CCR5 are important for recruitment, the restriction of SDF to bile ducts suggests that CXCR4 may be involved in the retention of alloactivated lymphocytes at sites of graft damage.
REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 154 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:858406 CAPLUS
DOCUMENT NUMBER: 136:117270
TITLE: HIV-1 gp120 and chemokine activation of Pyk2 and mitogen-activated protein kinases in primary macrophages mediated by calcium-dependent, pertussis toxin-insensitive chemokine receptor signaling
AUTHOR(S): Del Corno, Manuela; Liu, Qing-Hua; Schols, Dominique; De Clercq, Erik; Gessani, Sandra; Freedman, Bruce D.; Collman, Ronald G.
CORPORATE SOURCE: Department of Medicine, University of Pennsylvania School of Medicine, Philadelphia, PA, USA
SOURCE: Blood (2001), 98(10), 2909-2916
CODEN: BLOOAW; ISSN: 0006-4971
PUBLISHER: American Society of Hematology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Human immunodeficiency virus type 1 (HIV-1) uses the chemokine receptors CCR5 and CXCR4 as coreceptors for entry. It was recently demonstrated that HIV-1 glycoprotein 120 (gp120) elevated calcium and activated several ionic signaling responses in primary human macrophages, which are important targets for HIV-1 in vivo. This study shows that chemokine receptor engagement by both CCR5-dependent (R5) and CXCR4-dependent (X4) gp120 led to rapid phosphorylation of the focal adhesion-related tyrosine kinase Pyk2 in macrophages. Pyk2 phosphorylation was also induced by macrophage inflammatory protein-1β (MIP-1β) and stromal cell-derived factor-1α, chemokine ligands for CCR5 and CXCR4. Activation was blocked by EGTA and by a potent blocker of calcium release-activated Ca++ (CRAC) channels, but was insensitive to pertussis toxin (PTX), implicating CRAC-mediated extracellular Ca++ influx but not Gαi protein-dependent mechanisms. Coreceptor engagement by gp120 and chemokines also activated 2 members of the mitogen-activated protein kinase (MAPK) superfamily, c-Jun amino-terminal kinase/stress-activated protein kinase and p38 MAPK. Furthermore, gp120-stimulated macrophages secreted the chemokines monocyte chemotactic protein-1 and MIP-1β in a manner that was dependent on MAPK activation. Thus, the gp120 signaling cascade in macrophages includes coreceptor binding, PTX-insensitive signal transduction, ionic signaling including Ca++ influx, and activation of Pyk2 and MAPK pathways, and leads to secretion of inflammatory mediators. HIV-1 Env signaling through these pathways may contribute to dysregulation of uninfected macrophage functions, new target cell recruitment, or modulation of macrophage infection.
REFERENCE COUNT: 77 THERE ARE 77 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 8 OF 154 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:816726 CAPLUS
DOCUMENT NUMBER: 135:355864
TITLE: The CaR receptor as a mediator of migratory cell chemotaxis and/or chemokinesis and methods and compositions for modulating movement of CaR receptor expressing cells
INVENTOR(S): Scadden, David T.; Poznansky, Mark C.; Olszak, Ivona T.; Brown, Edward M.
PATENT ASSIGNEE(S): The General Hospital Corporation, USA; The Brigham and Women's Hospital, Inc.
SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001083546	A1	20011108	WO 2000-US15440	20000602
<--				
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002132224	A1	20020919	US 2001-2854	20011101
US 7176243	B2	20070213		
WO 2003104256	A2	20031218	WO 2002-US35145	20021101
WO 2003104256	A3	20041202		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002367964	A1	20031222	AU 2002-367964	20021101
US 2006292689	A1	20061228	US 2006-429902	20060508

PRIORITY APPLN. INFO.: US 2000-200861P P 20000501
WO 2000-US15440 A2 20000602
US 2001-2854 A 20011101
WO 2002-US35145 W 20021101

AB This invention relates to methods and compns. for modulating movement of eukaryotic cells with migratory capacity. More specifically, the invention relates to methods and compns. for modulating movement of calcium-sensing receptor (CaR) expressing cells of hematopoietic, neural, epithelial, endothelial, or mesenchymal origin, in a specific site in a subject. The foregoing are useful, inter alia, in the treatment of condictions characterized by a need to modulate migratory-cell movement assocd. with specific sites in a subject. Specific sites include sites of inflammation and modulation of migratory-cell movement is movement away from an agent source, or repulsion.
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 9 OF 154 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:791626 CAPLUS
DOCUMENT NUMBER: 136:133459
TITLE: The presence of chemokine receptor (CCR5, CXCR3, CCR3)-positive cells and chemokine (MCP-1, MIP-1α, MIP-1β, IP-10)-positive cells in human periapical granulomas
AUTHOR(S): Kabashima, Hiroaki; Yoneda, Masahiro; Nagata, Kengo; Hirofuji, Takao; Ishihara, Yoshihisa; Yamashita, Megumi; Maeda, Katsumasa
CORPORATE SOURCE: Section of Periodontology, Division of Oral Rehabilitation, Kyushu University, Fukuoka, 812-8582, Japan
SOURCE: Cytokine (2001), 16(2), 62-66
CODEN: CYTIE9; ISSN: 1043-4666
PUBLISHER: Academic Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The infiltration of leukocytes into inflammation sites such as observed in human periapical granulomas is considered to be mediated by chemotactic factors. Here, the authors examined the presence of chemokine- and chemokine receptor-pos. cells in samples obtained from human subjects by immunohistochem. methods. Macrophage chemotactic protein-1 (MCP-1), macrophage inflammatory protein (MIP)-1α, MIP-1β, and IFN-inducible protein 10 (IP-10)-producing cells were present in periapical granulomas. In addition, chemokine receptor CCR3-, CCR5 -, and CXCR3-pos. cells were also present. In contrast, no factor expression was observed in clin. healthy periodontal ligament, serving as a neg. control. Thus, these chemokines are responsible for modulating the process of disease, such as human apical periodontitis. (c) 2001 Academic Press.
REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 154 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:783638 CAPLUS
DOCUMENT NUMBER: 136:68469
TITLE: Induction of rapid and extensive β-chemokine synthesis in macrophages by human immunodeficiency virus type 1 and gp120, independently of their coreceptor phenotype
AUTHOR(S): Choe, Wonkyu; Volsky, David J.; Potash, Mary Jane
CORPORATE SOURCE: Division of Molecular Virology, St. Luke's-Roosevelt Hospital Center, Columbia University, New York, NY, 10019, USA
SOURCE: Journal of Virology (2001), 75(22), 10738-10745
CODEN: JOVIAM; ISSN: 0022-538X
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Human immunodeficiency virus type 1 (HIV-1) interacts with its target cells through CD4 and a coreceptor, generally CCR5 or CXCR4. Macrophages display CD4, CCR5, and CXCR4 that are competent for binding and entry of virus. Virus binding also induces several responses by lymphocytes and macrophages that can be dissociated from productive infection. The authors investigated the responses of macrophages to exposure to a series of HIV-1 species, R5 species that productively infect and X4 species that do not infect macrophages. The authors chose to monitor production of several physiol. relevant factors within hours of treatment to resolve virally induced effects that may be unlinked to HIV-1 production Our novel findings indicate that independently of their coreceptor phenotype and independently of virus replication, exposure to certain R5 and X4 HIV-1 species induced secretion of high levels of macrophage inflammatory protein 1α (MIP-1α), MIP-1β, RANTES, and tumor necrosis factor alpha. However two of the six R5 species tested, despite efficient infection, were unable to induce rapid chemokine production The acute effects of virus on macrophages could be mimicked by exposure to purified R5 or the X4 HIV-1 envelope glycoprotein gp120. Depletion of intracellular Ca2+ or inhibition of protein synthesis blocked the chemokine induction, implicating Ca2+-mediated signal transduction and new protein synthesis in the response. The group of viruses able to induce this chemokine response was not consistent with coreceptor usage. The authors conclude that human macrophages respond rapidly to R5 and X4 envelope binding by production of high levels of physiol. active proteins that are implicated in HIV-1 pathogenesis.
REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 11 OF 154 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:751265 CAPLUS
DOCUMENT NUMBER: 136:293342
TITLE: The SDF-1-CXCR4 axis stimulates VEGF secretion and activates integrins but does not affect proliferation and survival in lymphohematopoietic cells
AUTHOR(S): Kijowski, Jacek; Baj-Krzyworzeka, Monika; Majka, Marcin; Reca, Ryan; Marquez, Leah A.; Christofidou-Solomidou, Melpo; Janowska-Wieczorek, Anna; Ratajczak, Mariusz Z.
CORPORATE SOURCE: Department of Pathology & Laboratory Medicine, University of Pennsylvania School of Medicine, Philadelphia, PA, 19104, USA
SOURCE: Stem Cells (Miamisburg, OH, United States) (2001), 19(5), 453-466
CODEN: STCEEJ; ISSN: 1066-5099
PUBLISHER: AlphaMed Press
DOCUMENT TYPE: Journal
LANGUAGE: English
AB To better define the role HIV-related chemokine receptor-chemokine axes play in human hematopoiesis, the authors investigated the function of the CXCR4 and CCR5 receptors in human myeloid, T- and B-lymphoid cell lines selected for the expression of these receptors (CXCR4+, CXCR4+ CCR5+, and CCR5+ cell lines). They evaluated the phosphorylation of MAPK p42/44, AKT, and STAT proteins and examined the ability of the ligands for these receptors [stromal-derived factor-1 (SDF-1) and macrophage inflammatory protein-1β (MIP-1β)] to influence cell growth, apoptosis, adhesion, and production of vascular endothelial growth factors (VEGF), matrix metalloproteinases (MMPs), and their tissue inhibitors (TIMPs) in these cell lines. The authors found that (1) SDF-1, after binding to CXCR4, activates multiple signaling pathways and that in comparison with the MIP-1β-CCR5 axis, plays a privileged role in hematopoiesis; (2) SDF-1 activation of the MAPK p42/44 pathway and the PI-3K-AKT axis does not affect proliferation and apoptosis but modulates integrin-mediated adhesion to fibronectin, and (3) SDF-1 induces secretion of VEGF, but not of MMPs or TIMPs. Evidently the role of SDF-1 relates primarily to the interaction of lymphohematopoietic cells with their microenvironment and does not directly influence their proliferation or survival. Thus, perturbation of the SDF-1-CXCR4 axis during HIV infection may effect interactions of hematopoietic cells with the hematopoietic microenvironment.
REFERENCE COUNT: 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 12 OF 154 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:729308 CAPLUS
DOCUMENT NUMBER: 136:15393
TITLE: 17β-Estradiol inhibits cytokine, chemokine, and chemokine receptor mRNA expression in the central nervous system of female mice with experimental autoimmune encephalomyelitis
AUTHOR(S): Matejuk, Agata; Adlard, Kirsten; Zamora, Alex; Silverman, Marc; Vandenbark, Arthur A.; Offner, Halina
CORPORATE SOURCE: Department of Neurology, Oregon Health Sciences University, Portland, OR, USA
SOURCE: Journal of Neuroscience Research (2001), 65(6), 529-542
CODEN: JNREDK; ISSN: 0360-4012
PUBLISHER: Wiley-Liss, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Cytokines and chemokines govern leukocyte trafficking, thus regulating inflammatory responses. In this study, the anti-inflammatory effects of low dose 17β-estradiol were evaluated on chemokine, chemokine receptor, and cytokine expression in the spinal cords (SC) of BV8S2 transgenic female mice during acute and recovery phases of exptl. autoimmune encephalomyelitis (EAE). In EAE protected mice, 17β-estradiol strongly inhibited mRNA expression of the chemokines RANTES, MIP-1α, MIP-2, IP-10, and MCP-1, and of the chemokine receptors CCR1, CCR2 and CCR5 at both time points. Conversely, ovariectomy, which abrogated basal 17β-estradiol levels and increased the severity of EAE, enhanced the expression of MIP-1α and MIP-2 that were over-expressed by inflammatory mononuclear cells in SC. 17β-Estradiol inhibited expression of LT-β, TNF-α, and IFN-γ in SC, but had no effect on IL-4 or IL-10, indicating reduced inflammation but no deviation toward a Th2 response. Interestingly, elevated expression of CCR1 and CCR5 by lymph node cells was also inhibited in 17β-estradiol treated mice with EAE. Low doses of 17β-estradiol added in vitro to lymphocyte cultures had no direct effect on the activation of MBP-Ac1-11 specific T cells, and only at high doses diminished production of IFN-γ, but not IL-12 or IL-10. These results suggest that the beneficial effects of 17β-estradiol are mediated in part by strong inhibition of recruited inflammatory cells, resulting in reduced production of inflammatory chemokines and cytokines in CNS, with modest effects on encephalitogenic T cells that seem to be relatively 17β-estradiol insensitive.
REFERENCE COUNT: 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 13 OF 154 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:714052 CAPLUS
DOCUMENT NUMBER: 136:4523
TITLE: Macrophage inflammatory protein 1α/CCL3 is required for clearance of an acute Klebsiella pneumoniae pulmonary infection
AUTHOR(S): Lindell, Dennis M.; Standiford, Theodore J.; Mancuso, Peter; Leshen, Zachary J.; Huffnagle, Gary B.
CORPORATE SOURCE: Pulmonary and Critical Care Medicine, The University of Michigan Medical School, Ann Arbor, MI, USA
SOURCE: Infection and Immunity (2001), 69(10), 6364-6369
CODEN: INFIBR; ISSN: 0019-9567
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The objective here was to determine the role of macrophage inflammatory protein 1α/CCL3 in pulmonary host defense during K. pneumoniae infection. Following intratracheal inoculation, 7-day survival of CCL3-/- mice was <10%, compared to 60% for CCL3+/+ mice. Survival of CCR5 -/- mice was equivalent to that of controls, indicating that the enhanced susceptibility of CCL3-/- mice to K. pneumoniae is mediated via another CCL3 receptor, presumably CCR1. At day 3, CFU burden in the lungs of CCL3-/- mice was 800-fold higher than in CCL3+/+ mice, demonstrating that CCL3 is critical for control of bacterial growth in the lung. Surprisingly, CCL3-/- mice had no differences in the recruitment of monocytes/macrophages and even showed enhanced neutrophil recruitment at days 1, 2, and 3 postinfection, compared to CCL3+/+ mice. Therefore, the defect in clearance was not due to insufficient recruitment of leukocytes. No differences in cytokine levels of monocyte chemoattractant protein 1 (MCP-1), interleukin 12, γ interferon, or tumor necrosis factor α in lung lavages were found between CCL3+/+ and CCL3-/- mice. CCL3-/- alveolar macrophages were found to have lower phagocytic activity toward K. pneumoniae than CCL3+/+ alveolar macrophages. Thus, CCL3 production is critical for activation of alveolar macrophages to control the pulmonary growth of the gram-neg. bacterium K. pneumoniae.
REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 14 OF 154 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:712652 CAPLUS
DOCUMENT NUMBER: 136:19009
TITLE: Complex immunomodulatory effects of interferon-β in multiple sclerosis include the upregulation of T helper 1-associated marker genes
AUTHOR(S): Wandinger, Klaus-Peter; Sturzebecher, Claus-Steffen; Bielekova, Bibiana; Detore, Greg; Rosenwald, Andreas; Staudt, Louis M.; McFarland, Henry F.; Martin, Roland
CORPORATE SOURCE: Neuroimmunology Branch, National Institute of Neurological Disorders and Stroke, National Institutes of Health, Bethesda, MD, 20892-1400, USA
SOURCE: Annals of Neurology (2001), 50(3), 349-357
CODEN: ANNEDJ; ISSN: 0364-5134
PUBLISHER: Wiley-Liss, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Multiple sclerosis (MS) is considered an autoimmune disease that is mediated by proinflammatory T helper-1 lymphocytes. The putative mechanism of interferon-β (IFN-β), an approved treatment for MS, includes the inhibition of T-cell proliferation, blocking of blood-brain-barrier opening and T-cell transmigration into the brain via interference with cell adhesion, and the upregulation of anti-inflammatory cytokines. In the present study, a gene expression anal. of IFN-β-treated peripheral blood mononuclear cells by cDNA microarray documents the broad effects of IFN-β that are not purely anti-inflammatory. Specifically, the authors addressed the effect of IFN-β on T helper-1 differentiation- or lineage markers such as the IL-12 receptor β2 chain and the chemokine receptor CCR5 that have been implicated in the pathogenesis of MS. Both markers were significantly upregulated in vitro and in vivo under IFN-β therapy, supporting that this cytokine exerts complex effects on the immune system. The combination of cDNA microarray and quant. PCR will expand the knowledge of the immunol. effects of such pleiotropic agents as IFN-β, may provide a key to why certain patients fail to respond, and eventually may influence the view of the disease pathogenesis.
REFERENCE COUNT: 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 15 OF 154 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:695196 CAPLUS
DOCUMENT NUMBER: 136:4569
TITLE: Monokine induced by IFN-γ is a dominant factor directing T cells into murine cardiac allografts during acute rejection
AUTHOR(S): Miura, Masayoshi; Morita, Ken; Kobayashi, Hirohito; Hamilton, Thomas A.; Burdick, Marie D.; Strieter, Robert M.; Fairchild, Robert L.
CORPORATE SOURCE: Urological Institute and Department of Immunology, Cleveland Clinic Foundation, Cleveland, OH, 44195, USA
SOURCE: Journal of Immunology (2001), 167(6), 3494-3504
CODEN: JOIMA3; ISSN: 0022-1767
PUBLISHER: American Association of Immunologists
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The use of chemokine antagonism as a strategy to inhibit leukocyte trafficking into inflammatory sites requires identification of the dominant chemokines mediating recruitment. The chemokine(s) directing T cells into cardiac allografts during acute rejection remain(s) unidentified. The role of the CXC chemokines IFN-γ inducible protein 10 (IP-10) and monokine induced by IFN-γ (Mig) in acute rejection of A/J (H-2a) cardiac grafts by C57BL/6 (H-2b) recipients was tested. Intra-allograft expression of Mig was observed at day 2 posttransplant and increased to the time of rejection at day 7 posttransplant. IP-10 mRNA and protein production were 2.5- to 8-fold lower than Mig. Whereas allografts were rejected at day 7-9 in control recipients, treatment with rabbit antiserum to Mig, but not to IP-10, prolonged allograft survival up to day 19 posttransplant. At day 7 posttransplant, allografts from Mig antiserum-treated recipients had marked reduction in T cell infiltration. At the time of rejection in Mig antiserum-treated recipients (i.e., days 17-19), intra-allograft expression of macrophage-inflammatory protein-1α, -1β, and their ligand CCR5 was high, whereas expression of CXCR3, the Mig receptor, was virtually absent. Mig was produced by the allograft endothelium as well as by recipient allograft-infiltrating macrophages and neutrophils, indicating the synergistic interactions between innate and adaptive immune compartments during acute rejection. Collectively, these results indicate that Mig is a dominant recruiting factor for alloantigen-primed T cells into cardiac allografts during acute rejection. Although Mig antagonism delays acute heart allograft rejection, the results also suggest that the alloimmune response circumvents Mig antagonism through alternative mechanisms.
REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

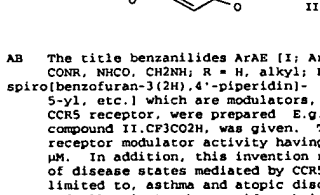
L6 ANSWER 16 OF 154 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:691158 CAPLUS
DOCUMENT NUMBER: 135:356650
TITLE: HIV envelope gp120 activates human arterial smooth muscle cells
AUTHOR(S): Schecter, Alison D.; Berman, Adriane B.; Yi, Lin; Mosoian, Arevik; McManus, Carrie M.; Berman, Joan W.; Klotman, Mary E.; Taubman, Mark B.
CORPORATE SOURCE: Zena and Michael A. Wiener Cardiovascular Institute and Department of Medicine, Division of Infectious Diseases, Mount Sinai School of Medicine, New York, NY, 10029, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (2001), 98(18), 10142-10147
CODEN: PNASA6; ISSN: 0027-8424
PUBLISHER: National Academy of Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English
AB There have been increasing reports of acute coronary thrombotic events in patients with HIV. Although these clin. events have been attributed primarily to dyslipidemia associated with protease inhibitor therapy, autopsy studies in children with HIV suggest the presence of an underlying arteriopathy. This study demonstrates that the HIV envelope protein, gp120, activates human arterial smooth muscle cells to express tissue factor, the initiator of the coagulation cascade. The induction of tissue factor by gp120 is mediated by two biol. relevant coreceptors for HIV infection, CXCR4 and CCR5, and is also dependent on the presence of functional CD4. Induction of tissue factor by gp120 requires activation of mitogen-activating protein kinases, activation of protein kinase C, and generation of reactive oxygen species, signaling pathways that have protean effects on smooth muscle cell physiol. The activation of smooth muscle cells by gp120 may play an important role in the vascular, thrombotic, and inflammatory responses to HIV infection.
REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 17 OF 154 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:688248 CAPLUS
DOCUMENT NUMBER: 135:356585
TITLE: IL-12 plays a pivotal role in LFA-1-mediated T cell adhesiveness by up-regulation of CCR5 expression
AUTHOR(S): Mukai, Takao; Iwasaki, Masayuki; Gao, Ping; Tomura, Michio; Yashiro-Ohtani, Yumi; Ono, Shiro; Murai, Masako; Matsushima, Kouji; Kurimoto, Masashi; Kogo, Mikihiko; Matsuya, Tokuzo; Fujiwara, Hiromi; Hamaoka, Toshiyuki
CORPORATE SOURCE: Department of Oncology, Biomedical Research Center, Osaka University Graduate School of Medicine, Suita, 565-0871, Japan
SOURCE: Journal of Leukocyte Biology (2001), 70(3), 422-430
CODEN: JLBIE7; ISSN: 0741-5400
PUBLISHER: Federation of American Societies for Experimental Biology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The chemokine receptor CCR5 has been implicated in the recruitment of T cells to inflammatory sites. However, the regulation of CCR5 induction on T cells and its contribution to T cell adhesiveness are poorly understood. Using a Th1 clone, 2D6, that can be maintained with interleukin (IL)-12 or IL-2 alone (designated 2D6IL-12 or 2D6IL-2, resp.), the authors investigated how CCR5 is induced on T cells and whether CCR5 is responsible for up-regulating the function of adhesion mols. 2D6IL-12 grew, forming cell aggregates, in culture containing IL-12. This was due to lymphocyte function-associated antigen (LFA)-1-intercellular adhesion mol. (ICAM)-1 interaction, because 2D6IL-12 expressed both LFA-1 and ICAM-1 and cell aggregation was inhibited by anti-ICAM-1 monoclonal antibody. Despite comparable levels of LFA-1 and ICAM-1 expression, 2D6IL-2 cells did not aggregate in culture with IL-2. It is important that there was a critical difference in CCR5 expression between 2D6IL-12 and 2D6IL-2; the former expressed high levels of CCR5, and the latter expressed only marginal levels. Both types of cells expressed detectable albeit low levels of RANTES (regulated on activation, normal T expressed and secreted) mRNA. Unlike IL-12 or IL-2, IL-18 induced high levels of RANTES mRNA expression without modulating CCR5 expression. Therefore, combined stimulation with IL-12 and IL-18 strikingly up-regulated 2D6 cell aggregation. Notably, LFA-1-mediated aggregation of 2D6IL-12 cells was suppressed by anti-CCR5 antibody. These results indicate that IL-12 plays a critical role in CCR5 expression on Th1 cells and consequently contributes to CCR5-mediated activation of LFA-1 mols.
REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 18 OF 154 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:661253 CAPLUS
DOCUMENT NUMBER: 135:226886
TITLE: Preparation of N-(spiro[benzofuran-3(2H),4'-piperidin]-5-yl)-1,1'-biphenyl-4-carboxamides for treating a CCR5-mediated diseases
INVENTOR(S): Bondinell, William E.; Ku, Thomas W.
PATENT ASSIGNEE(S): Smithkline Beecham Corporation, USA
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001064213	A1	20010907	WO 2001-US6837	20010302

<--
W: AE, AL, AU, BA, BB, BG, BR, BZ, CA, CN, CO, CZ, DZ, EE, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MA, MG, MK, MN, MX, MZ, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, TZ, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: US 2000-186418P P 20000302
OTHER SOURCE(S): MARPAT 135:226886
GI



II

AB The title benzanilides ArAE [I; Ar = (un)substituted biphenyl, Ph; A = CONR, NHCO, CH2NH; R = H, alkyl; E = spiro[benzofuran-3(2H),4'-piperidin]-5-yl, etc.] which are modulators, agonists or antagonists of the CCR5 receptor, were prepared E.g., a multi-step synthesis of the compound II.CF3CO2H, was given. The compds. I showed CCR5 receptor modulator activity having IC50 values in the range of 0.0001-100 μM. In addition, this invention relates to the treatment and prevention of disease states mediated by CCR5, including, but not limited to, asthma and atopic disorders (for example, atopic dermatitis and allergies), rheumatoid arthritis, sarcoidosis, or idiopathic pulmonary fibrosis and other fibrotic diseases, atherosclerosis, psoriasis, autoimmune diseases such as multiple sclerosis, treating and/or preventing

L6 ANSWER 18 OF 154 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
rejection of transplanted organs, and inflammatory bowel disease, all in mammals, by the use of substituted benzanilides which are CCR5 receptor antagonists. Furthermore, since CD8+ T cells have been implicated in COPD, CCR5 may play a role in their recruitment and therefore antagonists to CCR5 could provide potential therapeutic use in the treatment of COPD. Also, since CCR5 is a co-receptor for the entry of HIV into cells, selective receptor modulators may be useful in the treatment of HIV infection.
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L6 ANSWER 19 OF 154 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:642919 CAPLUS
DOCUMENT NUMBER: 135:317236
TITLE: Expression and function of chemokine receptors on human thymocytes: implications for infection by human immunodeficiency virus type 1
AUTHOR(S): Taylor, James R., Jr.; Kimbrell, Katherine C.; Scoggins, Robert; Delaney, Marie; Wu, Lijun; Camerini, David
CORPORATE SOURCE: Department of Microbiology and Myles H. Thaler Center for AIDS and Human Retrovirus Research, University of Virginia, Charlottesville, VA, 22908, USA
SOURCE: Journal of Virology (2001), 75(18), 8752-8760
CODEN: JOVIAM; ISSN: 0022-538X
PUBLISHER: American Society for Microbiology
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The presence or absence of the receptor CD4 and the coreceptors CCR5 and CXCR4 restrict the cell tropism of human immunodeficiency virus type 1 (HIV-1). Despite the importance of thymic infection by HIV-1, conflicting reports regarding the expression of HIV-1 coreceptors on human thymocytes have not been resolved. The authors assayed the expression and function of the major HIV-1 coreceptors, CCR5 and CXCR4, as well as CCR4 and CCR7 as controls, on human thymocytes. The authors detected CCR5 on 2.5% of thymocytes, CXCR4 on 53% of the cells, and CCR4 on 16% and CCR7 on 11% of human thymocytes. Moreover, infection by R5 HIV-1 did not significantly induce expression of CCR5. The authors found that two widely used anti-CCR5 monoclonal antibodies cross-reacted with CCR8, which may account for discrepancies among published reports of CCR5 expression on primary cells. This cross-reactivity could be eliminated by deletion of amino acids 2 through 4 of CCR8. Chemotaxis assays showed that SDF-1, which binds CXCR4; MDC, which binds CCR4; and ELC, which binds CCR7, mediated significant chemotaxis of thymocytes. In contrast, MIP-1β, whose receptor is CCR5, did not induce significant chemotaxis. Our results indicate that CXCR4, CCR4, CCR7, and their chemokine ligands may be involved in thymocyte migration during development in the thymus. CCR5 and its ligands, however, are likely not involved in these processes. Furthermore, the pattern of CCR5 and CXCR4 expression that the authors found may explain the greater susceptibility of human thymocytes to infection by HIV-1 isolates capable of using CXCR4 in cell entry compared to those that use only CCR5.
REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L6 ANSWER 20 OF 154 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:623434 CAPLUS
DOCUMENT NUMBER: 135:317222
TITLE: Selective recruitment of Th2-type cells and evasion from a cytotoxic immune response mediated by viral macrophage inhibitory protein-II
AUTHOR(S): Weber, Kim S. C.; Grone, Hermann-Josef; Rocken, Martin; Klier, Christiane; Gu, Songhai; Wank, Rudolf; Proudfoot, Amanda E. I.; Nelson, Peter J.; Weber, Christian
CORPORATE SOURCE: Institut fur Prophylaxe der Kreislaufkrankheiten, Ludwig-Maximilians-Universitat, Munchen, Germany
SOURCE: European Journal of Immunology (2001), 31(8), 2458-2466
CODEN: EJIMAF; ISSN: 0014-2980
PUBLISHER: Wiley-VCH Verlag GmbH
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The viral CC chemokine macrophage inhibitory protein-II (vMIP-II) encoded by human herpes virus 8 (HHV-8) binds to multiple chemokine receptors, however, its ability to control the initial recruitment of specific leukocyte subtypes from the peripheral circulation has not been fully clarified. Here we show that vMIP-II blocks the firm arrest and transmigration of monocytes or Th1-like T lymphocytes triggered by RANTES immobilized on activated human microvascular endothelium (HMVEC) under flow conditions. The internalization of the receptors CCR1 and CCR5 that mediate arrest and transmigration of these cells in response to RANTES was prevented by vMIP-II, supporting its role as an antagonist of CCR1 and CCR5. In contrast, vMIP-II triggered the firm arrest of eosinophils and Th2-like T cells by engaging CCR3, as confirmed by its down-regulation. Immunohistochem. anal. of HHV-8-associated Kaposi's sarcoma lesions marked by vMIP-II expression and mononuclear cell infiltration revealed a predominance of Th2-type CCR3+ lymphocytes over Th1-type CXCR3+/CCR5+ leukocytes, indicating that as a CCR3 agonist vMIP-II can drive a Th2-type immune response in vivo. Thus, our data provide evidence for a immunomodulatory role of vMIP-II in directing inflammatory cell recruitment away from a Th1-type towards a Th2-type response and thereby facilitating evasion from cytotoxic reactions.
REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

```
=> FIL STNGUIDE
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    93.69      94.86

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                   -21.60     -21.60

FILE 'STNGUIDE' ENTERED AT 16:30:47 ON 30 JAN 2008
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Jan 25, 2008 (20080125/UP).

=> dhis
DHIS IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> log y
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.66      95.52

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                     0.00     -21.60

STN INTERNATIONAL LOGOFF AT 16:37:39 ON 30 JAN 2008
```

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTANXR1625

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	AUG 06	CAS REGISTRY enhanced with new experimental property tags
NEWS 3	AUG 06	FSTA enhanced with new thesaurus edition
NEWS 4	AUG 13	CA/CAplus enhanced with additional kind codes for granted patents
NEWS 5	AUG 20	CA/CAplus enhanced with CAS indexing in pre-1907 records
NEWS 6	AUG 27	Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB
NEWS 7	AUG 27	USPATOLD now available on STN
NEWS 8	AUG 28	CAS REGISTRY enhanced with additional experimental spectral property data
NEWS 9	SEP 07	STN AnaVist, Version 2.0, now available with Derwent World Patents Index
NEWS 10	SEP 13	FORIS renamed to SOFIS
NEWS 11	SEP 13	INPADOCDB enhanced with monthly SDI frequency
NEWS 12	SEP 17	CA/CAplus enhanced with printed CA page images from 1967-1998
NEWS 13	SEP 17	CAplus coverage extended to include traditional medicine patents
NEWS 14	SEP 24	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 15	OCT 02	CA/CAplus enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS 16	OCT 19	BEILSTEIN updated with new compounds
NEWS 17	NOV 15	Derwent Indian patent publication number format enhanced
NEWS 18	NOV 19	WPIX enhanced with XML display format
NEWS 19	NOV 30	ICSD reloaded with enhancements
NEWS 20	DEC 04	LINPADOCDB now available on STN
NEWS 21	DEC 14	BEILSTEIN pricing structure to change
NEWS 22	DEC 17	USPATOLD added to additional database clusters
NEWS 23	DEC 17	IMSDRUGCONF removed from database clusters and STN
NEWS 24	DEC 17	DGENE now includes more than 10 million sequences
NEWS 25	DEC 17	TOXCENTER enhanced with 2008 MeSH vocabulary in MEDLINE segment
NEWS 26	DEC 17	MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary
NEWS 27	DEC 17	CA/CAplus enhanced with new custom IPC display formats
NEWS 28	DEC 17	STN Viewer enhanced with full-text patent content from USPATOLD
NEWS 29	JAN 02	STN pricing information for 2008 now available
NEWS 30	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS 31	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS 32	JAN 28	MARPAT searching enhanced
NEWS 33	JAN 28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS 34	JAN 28	TOXCENTER enhanced with reloaded MEDLINE segment
NEWS 35	JAN 28	MEDLINE and LMEDLINE reloaded with enhancements

NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2,

CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 11:58:09 ON 30 JAN 2008

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 11:58:31 ON 30 JAN 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 29 JAN 2008 HIGHEST RN 1001040-86-3
DICTIONARY FILE UPDATES: 29 JAN 2008 HIGHEST RN 1001040-86-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

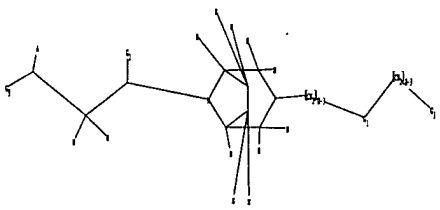
TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

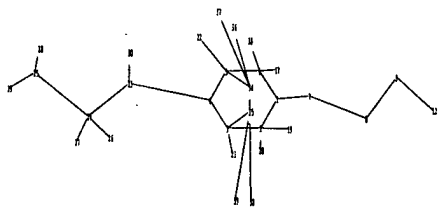
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\Stnexp\Queries\10539859a.str





chain nodes :
7 8 9 12 17 18 19 20 21 22 23 24 25 26 27 28 29 30 36 37 38 39

ring nodes :
1 2 3 4 5 6 34 35
chain bonds :
1-7 2-19 2-20 3-21 4-23 5-22 6-17 6-18 7-8 8-9 9-12 23-24 23-30 24-25
24-26 24-27 25-28 25-29 34-36 34-37 35-38 35-39
ring bonds :
1-2 1-6 2-3 3-4 3-35 4-5 5-6 5-34 34-35
exact/norm bonds :
1-2 1-6 2-3 3-4 4-5 4-23 5-6 7-8 8-9 9-12 23-30 25-28 25-29
exact bonds :
1-7 2-19 2-20 3-21 3-35 5-22 5-34 6-17 6-18 23-24 24-25 24-26 24-27
34-35 34-36 34-37 35-38 35-39
isolated ring systems :
containing 1 :

G1:O,S

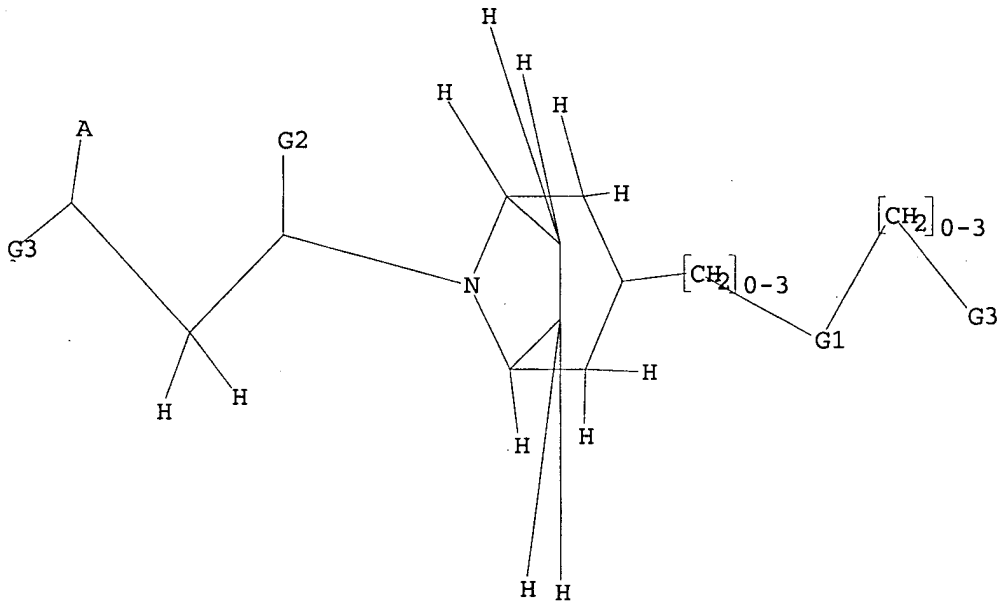
G2:H,Ak

G3:Cy,Ak

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 12:CLASS
17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS
25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS 34:Atom 35:Atom
36:CLASS 37:CLASS 38:CLASS 39:CLASS

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



G1 O,S

G2 H,Ak

G3 Cy,Ak

Structure attributes must be viewed using STN Express query preparation.

=> s l1
SAMPLE SEARCH INITIATED 11:58:52 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 468 TO ITERATE

100.0% PROCESSED 468 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 8063 TO 10657
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 full
FULL SEARCH INITIATED 11:58:58 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 9079 TO ITERATE

100.0% PROCESSED 9079 ITERATIONS 22 ANSWERS
SEARCH TIME: 00.00.01

L3 22 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	178.36	178.57

FILE 'CAPLUS' ENTERED AT 11:59:03 ON 30 JAN 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 30 Jan 2008 VOL 148 ISS 5
FILE LAST UPDATED: 29 Jan 2008 (20080129/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

=> s l3 full
L4 9 L3

=> d ibib abs hitstr tot

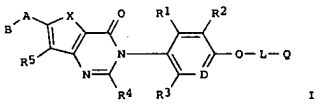
L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:933108 CAPLUS
DOCUMENT NUMBER: 147:301188
TITLE: Preparation of novel amino alcohol-substituted arylthienopyrimidinones, process for their preparation and their use as medicaments
INVENTOR(S): Schwink, Lothar; Stengelin, Siegfried; Gossel, Matthias; Hessler, Gerhard; Haack, Torsten; Lennig, Petra
PATENT ASSIGNEE(S): Sanofi-Aventis, Fr.
SOURCE: PCT Int. Appl., 166pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007093365	A2	20070823	WO 2007-EP1213	20070213
WO 2007093365	A3	20071004		

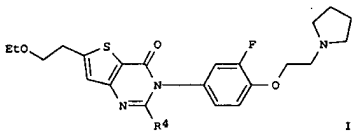
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRIORITY APPLN. INFO.: DE 2006-102006007049A 20060215

OTHER SOURCE(S): MARPAT 147:301188
GI



I

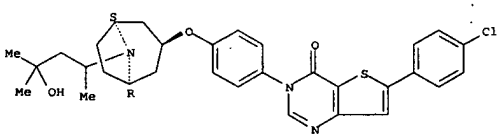


I

L4 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

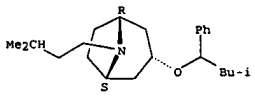
AB Title compds. I [R1-3 and R6 independently = H, halo, CF3, NO2, etc.; R4 = H or alkyl; R5 = H, halo, OH , CN, (un)substituted alkoxy, etc.; D = N or CR6; A = bond or 1-8 membered linker; B = H, alkyl, hydroxyalkyl; L = bond or alkylene; Q = (un)saturated bicyclic, tricyclic, spirocyclic ring with 0-3 heteroatoms, or NR7R8 where R7 and R8 independently = H, (un)substituted alkyl, alkoxyalkyl, etc.], and their pharmaceutically acceptable salts, are prepared and disclosed as MCH antagonists. Thus, e.g., II was prepared by hydrogenation of 6-((Z)-2-ethoxyvinyl)-3-(3-fluoro-4-(2-pyrrolidin-1-ylethoxy)phenyl]-3H-thieno[3,2-d]pyrimidin-4-one (preparation given). In calcium immobilization assays, selected I demonstrated IC50 values ranging from 0.10 - 13.04 μM.
IT 947174-16-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of novel amino alc.-substituted arylthienopyrimidinones as MCH antagonists)
RN 947174-16-5 CAPLUS
CN Thieno[3,2-d]pyrimidin-4(3H)-one, 6-(4-chlorophenyl)-3-[4-[[(3-endo)-8-(3-hydroxy-1,3-dimethylbutyl)-8-azabicyclo[3.2.1]oct-3-yl]oxy]phenyl]- (CA INDEX NAME)

Relative stereochemistry.



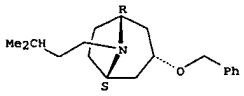
L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:794412 CAPLUS
DOCUMENT NUMBER: 142:6683
TITLE: Combinatorial synthesis of benztropine libraries and their evaluation as monoamine transporter inhibitors
AUTHOR(S): Pedersen, Hanne; Sinning, Steffen; Buelow, Anne; Wiborg, Ove; Falborg, Lise; Bols, Mikael
CORPORATE SOURCE: Department of Chemistry, University of Aarhus, Aarhus, DK-8000, Den.
SOURCE: Organic & Biomolecular Chemistry (2004), 2(19), 2861-2869
CODEN: OBCRAK; ISSN: 1477-0520
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 142:6683
AB A combinatorial synthesis of benztropine analogs is presented. Radical azidation of 3-benzyloxy-8-azabicyclo[3.2.1]octane-8-carboxylic acid tert-Bu ester to 3-(1-azidobenzyloxy)-8-azabicyclo[3.2.1]octane-8-carboxylic acid tert-Bu ester (I) was used as a key step in the synthesis. This step was optimized by adding 10% DMF to the reaction. Reaction of I with Ph magnesium bromide followed by Boc removal and N-methylation gave benztropine. Reaction of five-component Grignard reagents with I was used to create a two-dimensional library of 25 N-normethylbenztropine analogs. Further reaction of this library with five alkyl bromides was carried out to create a three-dimensional library containing 125 compds. Screening of the libraries towards binding and inhibition of uptake of the human dopamine (hDAT), serotonin (hSERT) and norepinephrine transporters (hNET) was carried out. None of the synthesized compds. were found to be stronger than benztropine, and none were selective for inhibition of binding over monoamine uptake.
IT 797763-57-6P 797763-81-6P
RL: CPN (Combinatorial preparation); PAC (Pharmacological activity); BIOL (Biological study); CMBI (Combinatorial study); PREP (Preparation)
(combinatorial synthesis of benztropine libraries and their evaluation as monoamine transporter inhibitors)
RN 797763-57-6 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 8-(3-methylbutyl)-3-(3-methyl-1-phenylbutoxy)-, (3-endo)- (CA INDEX NAME)

Relative stereochemistry.



RN 797763-81-6 CAPLUS
CN 8-Azabicyclo[3.2.1]octane, 8-(3-methylbutyl)-3-(phenylmethoxy)-, (3-endo)-
(CA INDEX NAME)

L4 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
Relative stereochemistry.

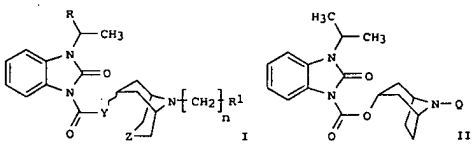


REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:462644 CAPLUS
DOCUMENT NUMBER: 137:6174
TITLE: Azabicycloalkyl esters and amides of 2-oxo-2,3-dihydrobenzimidazole-1-carboxylic acid and their preparation, pharmaceutical compositions, and use as 5-HT4 receptor agonists
INVENTOR(S): Pellegrini, Carlo Maria; Cereda, Enzo; Ezhaya, Antoine; Schiavi, Giovanni Battista; Sagrata, Angelo; Giraldo, Ettore
PATENT ASSIGNEE(S): Boehringer Ingelheim Italia S.p.A., Italy
SOURCE: Ital., 62 pp.
CODEN: ITXXBY
DOCUMENT TYPE: Patent
LANGUAGE: Italian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
IT 1298271	B1	19991220	IT 1998-MI305	19980218
PRIORITY APPLN. INFO.:			IT 1998-MI305	19980218

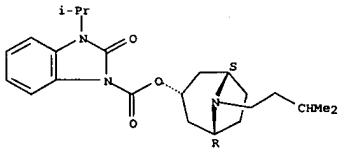
OTHER SOURCE(S): MARPAT 137:6174
GI



AB Title compds. I are disclosed [wherein: R = H, Me; Y = O, NH; Z = CH2, bond; n = 0, 1, 2, 3, except that when R1 = H, then n ≠ 0 or 1; R1 = H, iso-Pr, Et, iso-Bu, cyclopropyl, cyclobutyl, cyclohexyl, vinyl, 2-methylpropenyl, 1-hydroxyethyl, ethynyl, benzyl, CONH2, CONMe2, COCH3, cyano, OR2, SR2, NR3R4; R2 = H, C1-3 alkyl; R3 = H, CH3, CONHEt, CONH2, CO2Et, COCH3, SO2Me; R4 = H, Me; including racemates, enantiomers, diastereomers, mixts., and physiol. acceptable acid addition salts]. The compds. are serotoninergic agonists, and have a high affinity and specificity for 5-HT4 serotoninergic receptors. As such they are useful for treating a variety of cardiovascular, gastrointestinal, and CNS diseases and disorders. Over 60 compds., including both esters (Y = O) and amides (Y = NH), were prepared For instance, 1-isopropyl-2-oxo-2,3-dihydrobenzimidazole was treated with Cl3COCOCl in THF to give the 1-carbonyl chloride derivative, which reacted with endo-8-n-propyl-8-azabicyclo[3.2.1]octan-3-ol (preparation given) in CH2Cl2 to give title compound
II [Q = n-Pr], isolated as the HCl salt. The similarly prepared compound II.HCl [Q = iso-Bu] bound to porcine striatal 5-HT4 receptors in vitro with a Ki of 3.6 + 10-8 M, but bound to 5-HT3 receptors (NG 108-15 cells) with a weaker Ki of 446 + 10-8 M. Selected I also induced contractions in isolated guinea pig colon, with an efficacy comparable to

L4 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
5-HT, and with blocking by the known 5-HT4 antagonist GR 113808.
IT 433226-74-5P, endo-8-(3-Methylbutyl)-8-azabicyclo[3.2.1]oct-3-yl 3-isopropyl-2-oxo-2,3-dihydrobenzimidazole-1-carboxylate hydrochloride
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of azabicycloalkyl esters and amides of oxodihydrobenzimidazolecarboxylic acid as 5-HT4 receptor agonists)
RN 433226-74-5 CAPLUS
CN 1H-Benzimidazole-1-carboxylic acid, 2,3-dihydro-3-(1-methylethyl)-2-oxo-, (3-endo)-8-(3-methylbutyl)-8-azabicyclo[3.2.1]oct-3-yl ester, monohydrochloride (9CI) (CA INDEX NAME)

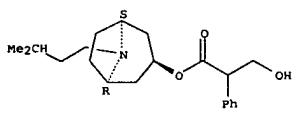
Relative stereochemistry.



● HCl

L4 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1976:494567 CAPLUS
DOCUMENT NUMBER: 85:94567
ORIGINAL REFERENCE NO.: 85:15161a,15164a
TITLE: A new method for technical synthesis of tertiary and quaternary d,l-tropic acid esters of some N-substituted nortropan- and granatan-3-ols
AUTHOR(S): Schulz, Werner; Banholzer, R.; Pook, K. H.
CORPORATE SOURCE: Hauptabt. Forsch., Fa C. H Boehringer Sohn, Ingelheim,
Fed. Rep. Ger.
SOURCE: Arzneimittel-Forschung (1976), 26(5A), 960-74
CODEN: ARZNAD; ISSN: 0004-4172
DOCUMENT TYPE: Journal
LANGUAGE: German
GI For diagram(s), see printed CA Issue.
AB Transesterification of tropine with PhCH(CHO)CO2Me gave 89.8% ester I (R =
dl-COCHPhCHO, R1 = Me, X = bond line, α-OR), which was reduced to 81.7% atropine (I, R = dl-COCHPhCH2OH). This method was applied to nortropanols I (R = H, R1 = alkyl, allyl, CH2C.tplbond.CH, cyclohexyl, 4-ClC6H4CH2, cyclohexylmethyl, X = bond line, α-OR) and I (R = H, R1 = CHMe2, X = bond line, β-OR) and granatanols I (R = H, R1 = alkyl, cyclohexylmethyl, 4-ClC6H4CH2, X = CH2, α-OR) and I (R = H, R1 = CHMe2, X = CH2, β-OR) to give their dl-tropates I (R = dl-COCHPhCH2OH). Quaternization of nortropanol tropates with alkyl halides gave salts with a pharmacol. profile (no further information) different from that of atropine.
IT 22226-43-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 22226-43-3 CAPLUS
CN Benzeneacetic acid, α-(hydroxymethyl)-, 8-(3-methylbutyl)-8-azabicyclo[3.2.1]oct-3-yl ester, hydrochloride, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.

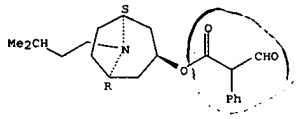


● HCl

IT 22226-45-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(reduction of)
RN 22226-45-5 CAPLUS
CN Benzeneacetic acid, α-formyl-, 8-(3-methylbutyl)-8-azabicyclo[3.2.1]oct-3-yl ester, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.

L4 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



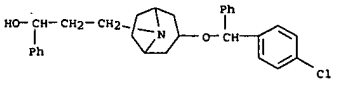
L4 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1969:461201 CAPLUS
DOCUMENT NUMBER: 71:61201
ORIGINAL REFERENCE NO.: 71:11259a,11262a
TITLE: Mydriatic, depressant and anticonvulsant 3-(α-phenylbenzyloxy)-8-substituted nortropanes and their substituents
INVENTOR(S): Childress, Scott J.; Sallay, Stephen I.
PATENT ASSIGNEE(S): American Home Products Corp.
SOURCE: U.S., 4 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3452029	A	19690624	US 1966-595601	19661121
PRIORITY APPLN. INFO.:			US 1966-595601 A	19661121

GI For diagram(s), see printed CA Issue.
AB Title compds. (I) are prepared and function as mydriatic agents, central nervous system depressants, and anticonvulsive agents. As an example 0.02 mole 3-(p-chloro-α-phenylbenzyloxy)nortropane (II), 0.01 mole phenylethyl bromide, and 0.1 g. NaI in 100 ml. BuOH is refluxed 24 hrs. Work up and treatment with oxalic acid in EtOH yields 3-(p-chloro-α-phenylbenzyloxy-8-phenethylnortropane oxalate, m. 159-60°. II (0.02 mole) treated with 0.024 mole β-(trimethylamino)propiophenone iodide in 50 ml. HCONMe2 to which 2.6 g. Na2CO3 is added is stirred 16 hrs. at room temperature and then diluted with water. A gum which sep. is treated with oxalic acid in EtOH to yield 3-[3-(p-chloro-α-phenylbenzyloxy)-8-nortropanyl]propiophenone oxalate (III), m. 100-2 (decomposition). III treated with NaBH4 at room temperature for 16 hrs. yields 3-(p-chloro-α-phenylbenzyloxy)-α-phenyl-8-nortropanepropanol oxalate, m. 86-6.5° (decomposition).
IT 23249-58-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 23249-58-3 CAPLUS
CN Nortropane-8-propanol, 3-[(p-chloro-α-phenylbenzyl)oxy]-α-phenyl-, oxalate (salt), stereoisomer (8CI) (CA INDEX NAME)

CM 1

CRN 47729-46-4
CMF C29 H32 Cl N O2



CM 2

L4 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CRN 144-62-7
CMF C2 H2 O4

L4 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1969:88037 CAPLUS
DOCUMENT NUMBER: 70:88037
ORIGINAL REFERENCE NO.: 70:16464h,16465a
TITLE: Tropic acid derivatives
INVENTOR(S): Banholzer, Rolf; Hausner, Alex; Korndoerfer, Otto; Schulz, Werner; Walther, Gerhard; Zeite, Karl
PATENT ASSIGNEE(S): Boehringer Ingelheim G.m.b.H.
SOURCE: S. African, 32 pp.
CODEN: SFXXAB
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ZA 6705252		19680226	ZA	
DE 1670142			DE	
FR 1539224			FR	
FR 8037			FR	
GB 1179900			GB	
US 3502683		19700324	US	19670829
US 3583996		19710608	US	19691203
PRIORITY APPLN. INFO.:			DE	19660902
			DE	19661007

OTHER SOURCE(S): MARPAT 70:88037
GI For diagram(s), see printed CA Issue.
AB The title compds., useful as central anticholinergics and spasmolytics, are represented by I or II and the synthesis of I or II is improved over previous methods by transesterification of PhCH(CHO)CO2Me (III Me ester) (IIIa) with the appropriate alc., and reducing the formyl group in the resultant ester with a NaBH4. For example, solns. of 58.8 g. IIIa in 250 ml. PhMe and 35.3 g. tropine in 250 ml. PhMe were simultaneously added dropwise to 0.5 g. NaOMe in 500 ml. PhMe, while the mixture was stirred and PhMe and MeOH were slowly distilled, using a bath temperature of not more than 135°. After addns. were complete, 500 ml. PhMe was added and the distillation was continued to the same extent. The mixture was kept overnight and filtered. The precipitate was washed with PhMe, then with Me2CO, leaving 79.8% tropine α-formylphenylacetate (IV), m. 222-3° (decomposition). Reduction of 28.7 g. IV in CH2Cl2 and MeOH by 1.9 g. NaBH4, added in 3 portions at 20° during 45 min., stirring 1 hr., addition of 50 ml. H2O, stirring 15 min., separation of the organic layer, which was dried (Na2SO4) and evaporated, gave 91% atropine (I, R1 = CH2CH2, R2 = Me, R3 = H), m. 115-6°. Similar transesterification of 53.5 g. IIIa and 31 g. scopine gave a solution which was concentrated to 300 ml. To this was added 100 ml. H2O and 15.1 g. NaBH4 was added during 4 hrs. The aqueous layer was separated and extracted with CHCl3, and the exts. added to the PhMe solution Drying and evaporation gave an oil which in EtOH was neutralized with N HBr and evaporated The residue was recrystd. from EtOH-Et2O to give 59.4 g.

L4 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
(±)-scopolamine (I, R1 = 1,2-ethylidenoxy (A), R2 = Me, R3 = H), m. 180-2°. Demethylation of 3α-acetoxy-6-tropene by COCl2 to give N-chlorocarbonyl-3α-acetoxy-6-nortropene, m. 85-6°, followed by sapon., gave 6-nortropen-3α-ol (V), m. 175.5-6.5° (cyclohexane), hydrochloride m. 279-80° (decompn.). V and EtBr have N-ethyl-6-nortropen-3α-ol (VI), bl3 104-6°, m. 56.5-8°. Transesterification of VI with IIIa gave the α-formylphenylacetate, m. 171-4°, which was reduced to VI tropate hydrochloride, m. 172-3° (Me2CO). By these or similar methods were prepd.: 23.7% N-propargylnortropine, III ester, m. 132-4°, and 13.8% tropate hydrochloride, m. 172-4° (Me2CHOH); N-amylnortropine, b0.1 130-1°, 61.8% III ester, m. 130-1°, and 71.2% tropate hydrochloride, m. 161-2° (MeCN); N-iso-amylnortropine, b0.1 103-5°, 80.9% III ester, m. 157-8°, and tropate hydrochloride, m. 168-70° (MeCN), 41.4%; N-hexylnortropine, b0.01 125-7°, III ester, m. 171-3°, 74.5%, tropate hydrochloride, m. 144-7° (Me2CO), 18.6%, and O-Ac tropate hydrochloride, m. 179-81°, 41.8%; N-heptylnortropine, b0.01 130-1°, III ester, m. 122-3°, 63.4%, and tropate hydrochloride, 56.6% (MeCN); N-octylnortropine, b0.005 132-4°, III ester, m. 110-1°, 77%, and tropate hydrochloride, m. 139-40° (MeCN), 65.6%; N-nonylnortropine, III ester, m. 98-9°, 73.4%, and tropate hydrochloride, m. 137-9° (MeCN), 70%; N-decylnortropine, III ester, m. 89-93°, 53.3%, and tropate hydrochloride, m. 132-3° (MeCN), 59.5%; N-undecylnortropine, III ester, m. 96-8°, 60.9%, and tropate hydrochloride, m. 117-20° (MeCN), 66.7%; N-dodecylnortropine, III ester, m. 100-2°, 95.3%, and tropate hydrochloride, m. 129-31° (MeCN); N-cetylnortropine, III ester, m. 82-4°, 77.5% and tropate hydrochloride, m. 123-4° (MeCN), 79.4%; N-cyclohexylmethyl-nortropine, m. 108-8°, III ester, m. 170-1°, 91%, and tropate hydrochloride, m. 173-6° (Me2CO), 65.1%; N-(p-chlorobenzyl)-nortropine, III ester, m. 134-8°, 75.4%, and tropate hydrochloride, m. 204-7° (EtOH), 63%; N-isopropylnortropine tropate hydrochloride, O-Ac deriv., m. 150-2° (Me2CHOH), 62%, and O-Bz deriv., m. 178-9° (MeCN), 60%; N-isopropyl-pseudonortropine, m. 113-7° (EtOAc) III ester, m. 203° (PhMe), 73.9%, and tropate hydrochloride, m. 152-4° (Me2CHOH), 80.8%; N-ethylnortropine, m. 67-70°, 75%, hydrochloride, m. 151-3°, and hydrobromide, m. 195-6°; N-propylnoratropine, 78%, hydrochloride, m. 161-2°, and hydrobromide, m. 160-1.5°; N-isopropylnoratropine, 76%, m. 114-16°, hydrochloride, m. 196-8°, and hydrobromide, m. 221-3°; N-butylnoratropine, 66.2%, hydrochloride, m. 159-61°; N-allylnoratropine, 55%, m. 75-7°, hydrochloride, m. 144-6°; N-cyclo-propylnoratropine, 72%, hydrochloride, m. 166-7°; N-cyclo-hexylnoratropine, 75%, m. 96-8°, hydrochloride, m. 197-9°; N-cyclooctylnoratropine, 87%, m. 114-16°, hydrochloride, m. 215-17°; pseudoatropine, 86.5%, hydrochloride, m. 198-9°; (-)-N-ethylnorscopolamine, 80.1%, hydrochloride, m. 188-90°, [α]2D1 -26.3°; (-)-N-propylnorscopolamine, 83%, hydrochloride, m. 177-8°, [α]2D0 -30°; (±)-N-Isopropylnorscopol-amine, 18%, hydrochloride, m. 213-14° (decompn.); (-)-N-isopropylnorscopolamine, 27.1%, hydrochloride, m. 214-16° (decompn.), [α]2D0 -27.3°; (±)-N-butylnorscopolamine, 24.5%, hydrochloride, m. 133-4°; (-)-N-butylnorscopolamine, 51.5%, hydrochloride, m. 146-8°, [α]2D0 -28.5°; (-)-N-amylnorscopolamine, 81.3%, hydrochloride, m. 160-2°, [α]2D0 -29.5°; (-)-N-isoamylnorscopolamine, 86.7%, hydrochloride, m. 186.8°, [α]2D0 -28.0°; (±)-N-hexylnorscopolamine, 10%,

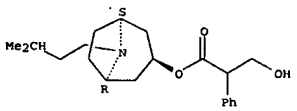
hydrochloride, m. 153°; (-)-N-hexylnorscopolamine, 55.5%, hydrochloride, m. 150-2°, [α]2D0 -25°, and O-Ac deriv., 53.6%, hydrochloride, m. 126-7°; (-)-N-cetylnorscopolamine, 61%, hydrochloride, m. 151-2°; (-)-N-allylnorscopolamine, 49%, hydrochloride, m. 165-6°, [α]2D0 -27.5°; (-)-N-benzylnorscopola-mine, 94.5%, m. 85-6°; (-)-N-(4-phenylbenzyl)norscopolamine, 96.5%, hydrochloride, m. 215° (decompn.); N-methylgranatanol, III ester, 46.6%, m. 174° (Me2CO), tropate, 74%, m. 102-3° (Me2CO), and tropate hydrochloride, m. 172-3°; N-propargylgranatoline, III ester, m. 120-2°, 27.8%, and tropate hydrochloride, m. 189-91° (MeCN), 20.2%; N-amylgranatoline, b0.1 120-2°, III ester, 90.5%, and tropate hydrochloride, m. 165-6°, 58.2%; N-isoamylgranatoline, b0.01 115-16°, III ester, 79%, and tropate hydrochloride, m. 173-4° (MeCNEt2O), 47%; N-hexylgranatoline, b0.05 141-3°, III ester, 82.2%, and tropate hydrochloride, m. 167-8° (Me2CO), 61%; N-hexylgranatoline O-acetyltropate hydrochloride, m. 198-201° (MeCN), 59.4%; N-heptylgranatoline, b0.1 162-5°, III ester, 31.2%, and tropate hydrochloride, m. 140-1° (Me2CO), 38%; N-octylgranatoline, III ester, 80%, and tropate hydrochloride, m. 140-2° (MeCN), 41.5%; N-nonylgranatoline, III ester, m. 95.8-8°, 59%, and tropate hydrochloride, m. 140-1° (MeCN), 51.8%; N-decylgranatoline, III ester, m. 90-3°, 72.5%, and tropate hydrochloride, m. 130-2° (Me2CO), 56.7%; N-undecylgranatoline, III ester, m. 105-8°, 67.5%, and tropate hydrochloride, m. 122-4° (Me2CO), 70%; N-dodecylgranatoline, III ester, m. 98-100°, 80%, and tropate hydrochloride, m. 132-3° (Me2CO), 76.5%; N-cetylgranatoline, III ester, m. 84-6°, 73.4%, and tropate hydrochloride, m. 127-8° (Me2CO), 74%; N-cyclohexylmethylgranatoline, III ester, m. 120°, 85.2%, and tropate hydrochloride, m. 163-5°, 35%; N-(4-chlorobenzyl)-granatoline, III ester, 98%, tropate hydrochloride, m. 218-20° (EtOH-Et2O), 10.5%, and O-benzoyltropate hydrochloride, m. 178-80° (MeCN); N-isopropylpseudogranatoline, m. 89-90° (EtOAc), III ester, m. 141-3° (PhMe-Me2CO), 79%, and tropate hydrochloride, m. 143-4° (MeCN), 74%; N-ethylgranatanol, tropate, m. 62-4°, 54%, and tropate hydrochloride, m. 161-3°; N-propylgranatanol, tropate, m. 70-2°, 47%, and tropate hydrochloride, m. 134-6°; N-isopropylgranatanol, tropate, m. 110-1°, 54.2%, and tropate hydrochloride, m. 173-4°; N-butylgranatanol, tropate, m. 62-4°, 57%, and tropate hydrochloride, m. 146-8°; N-propylpseudogranatanol, tropate, 77%, and tropate hydrochloride, m. 178-80°; 6-tropene-3α-ol, III ester, m. 161-3° (decompn.) (Me2CO), 70.9%, and 6,7-dehydroatropine, m. 102-5° (EtOAc), 85.4%, tartrate, m. 139-41° (EtOH), picrate, m. 155-7° (EtOH), O-Bz deriv., m. 149-51° (EtOAc); and 6-tropene-3β-ol, m. 225-7° (decompn.), III ester, and tropate hydrochloride, m. 169-72° (Me2CHOH).

IT 22226-43-3P 22226-45-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 22226-43-3 CAPLUS

CN Benzeneacetic acid, α-(hydroxymethyl)-, 8-(3-methylbutyl)-8-azabicyclo[3.2.1]oct-3-yl ester, hydrochloride, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.

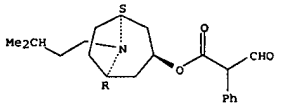


● HCl

RN 22226-45-5 CAPLUS

CN Benzeneacetic acid, α-formyl-, 8-(3-methylbutyl)-8-azabicyclo[3.2.1]oct-3-yl ester, endo- (9CI) (CA INDEX NAME)

Relative stereochemistry.



ACCESSION NUMBER: 1960:39199 CAPLUS
DOCUMENT NUMBER: 54:39199
ORIGINAL REFERENCE NO.: 54:7766e-i,7767a-h
TITLE: Benzhydryl and substituted benzhydryl ethers of nortropine, granatoline, and homogranatoline derivatives
INVENTOR(S): Boehringer, Albert; Boehringer, Ernst; Liebrecht, Ilse; Liebrecht, Julius; Mayer-List, Walter
PATENT ASSIGNEE(S): C. H. Boehringer Sohn
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 824875		19591209	GB 1957-7952	19570311
DE 1077223			DE	

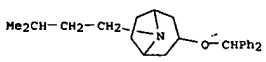
AB The preparation of the title compds., which are antihistamines, is described.
N-Ethylnortropine (I) (3.89 g.), 7.64 g. benzhydryl chloride (II), 4.64 g.
BuJN (III), and 25 cc. anhydrous toluene, refluxed 4 hrs. at 180°, 3.8 g. II added and refluxing continued 14 hrs., 3.8 g. II added and refluxing continued 24 hrs., the solvent distilled in vacuo, and the residual oil mixed with Me2CO gives N-ethyl-8-aza-3-bicyclo [3.2.1]octyl benzhydryl ether-HCl, m. 190-1° (Me2CO), 86.5% yield. The following compds. are similarly prepared: N-ethyl-8-aza-3-bicyclo[3.2.1]octyl p-methoxybenzhydryl ether-HCl (from 3.87 g. I, 4.64 g. III, and 8.64 g. p-methoxybenzhydryl chloride in 85.4% yield), m. 168-9° (MeOH-isopropyl ether); N-ethyl-8-aza-3-bicyclo[3.2.1]octyl p-chlorobenzhydryl ether-HCl (from 1.95 g. I, 4.4 g. p-chlorobenzhydryl chloride, and 2.32 g. III in 81.2% yield), m. 227-8° (MeCN); N-propyl-8-aza-3-bicyclo[3.2.1]octyl benzhydryl ether-HCl (from 4.23 g. N-propylnortropine, 7.64 g. II, and 4.64 g. III in 94.4% yield), m. 180-4° (EtOAc); N-isopropyl-8-aza-3-bicyclo[3.2.1]octyl benzhydryl ether-HCl (from 4.22 g. N-isopropylnortropine, 15.27 g. II, and 9.28 g. III in 58.4% yield), m. 194-7° (EtOAc) [methanesulfonate decomposed 183-4° (iso-PrOH-iso-Pr2O); HBr salt decomposed 208-10° (MeCN or EtOH)]; N-butyl-8-aza-3-bicyclo[3.2.1]octyl benzhydryl ether-HCl (from 4.56 g. N-butylnortropine, 7.64 g. II, and 4.64 g. III in 72.5% yield), m. 179-83° (acetone); N-amyl-8-aza-3-bicyclo[3.2.1]octyl benzhydryl ether-HCl (from 4.92 g. N-amylnortropine, 15.28 g. II, and 9.28 g. III in 42.5% yield), yellowish needles, m. 189-91° (EtOAc); N-hexyl-8-aza-3-bicyclo[3.2.1]octyl benzhydryl ether-HCl (from 5.3 g. N-hexylnortropine, 7.64 g. II, and 4.64 g. III in 88.5% yield), m. 177-80° (iso-BuOAc); N-heptyl-8-aza-3-bicyclo[3.2.1]octyl benzhydryl ether-HCl (from 5.65 g. N-heptylnortropine, 7.64 g. II, and 4.64 g. III in 66.9% yield), m. 168-70° (EtOAc); N-octyl-8-aza-3-bicyclo[3.2.1]octyl benzhydryl ether-HCl (from 6.23 g. N-octylnortropine, 7.64 g. II, and 4.64 g. III in 49.1% yield), m. 100-2° (iso-Pr2O); N-allyl-8-aza-3-bicyclo[3.2.1]octyl benzhydryl ether-HBr (from 5.9 g. N-allylnortropine, 9.8 g. benzhydryl bromide (IV), and 6.96 g. III in 85% yield), m. 177-9° (MeCN); N-benzyl-8-aza-3bicyclo[3.2.1]octyl benzhydryl ether-HBr (from 8.15 g. N-benzylnortropine, 9.8 g. IV, and 6.96 g. III in 43.0% yield), decomposing

243-4° (MeCN); N-isobutyl-8-aza-3-bicyclo[3.2.1]octyl benzhydryl ether-HBr (from 36.6 g. N-isobutylnortropine, 75 g. IV, and 37.2 g. III in 76.5% yield), m. 160-1° (MeCN); [methanesulfonate decompd. 182-3° (EtOAc)]; N-isopropyl-8-aza-3-bicyclo[3.2.1]octyl p-methoxybenzhydryl ether-HCl in 43.2% yield, decompd. 191-2° (MeCN-iso-Pr2O); N-propyl-8-aza-3-bicyclo[3.2.1]octyl p,p'-dibromobenzhydryl ether-HBr 76.6% yield, m. 236-7° (MeCN); N-isoamyl-8-aza-3-bicyclo[3.2.1]octyl benzhydryl ether-HBr in 75.6% yield, m. 179-81° (MeCN); N-isoamyl-8-aza-3-bicyclo [3.2.1] octyl p-methoxybenzhydryl ether-HCl in 55% yield, m. 145-7° (iso-BuOAc); 8-aza-3-bicyclo[3.2.1]octyl benzhydryl ether-HBr [from 127 g. nortropine (V), 494 g. IV, and 186 g. III in 63.3% yield], decompd. 238-40° (MeCN) or PrOH) [methanesulfonate decompd. 191-3° (iso-PrOH-iso-Pr2O)]; 8-aza-3-bicyclo[3.2.1]octyl p-methoxybenzhydryl ether-HCl (from 12.7 g. V, 46.5 g. p-methoxybenzhydryl chloride, and 18.6 g. III in 69.5% yield), decompd. 223-4° (PrOH); 8-aza-3-bicyclo[3.2.1]octyl p-chlorobenzhydryl ether-HCl (from 12.7 g. V, 47.2 g. p-chlorobenzhydryl chloride, and 18.6 g. III in 53% yield), light yellow, m. 192-3° (PrOH-iso-Pr2O); 9-aza-3-bicyclo[3.3.1]nonyl benzhydryl ether-HBr in 66% yield, m. 242-3° (EtOH) [methanesulfonate m. 190-2° (iso-PrOH-iso-Pr2O)]. N-Ethylgranatoline (4.25 g.), 7.64 g. II, 4.64 g. III, and 50 cc. abs. toluene are refluxed 5 hrs. at 180°. White crystals separate after 10 min. Abs. toluene (10 cc.) is then added to the reaction soln.; after 60 min. a further 15 cc. is added. After a reaction time of 3 hrs. 7.64 g. II and 4.64 g. III are added. On completing the reaction, the soln. is filtered and solvent removed in vacuo; the residue is stirred with Me2CO to induce crystn. A 75.9% yield of N-ethyl-9-aza-3-bicyclo[3.3.1]nonyl benzhydryl ether-HCl, m. 184-8° (iso-BuOAc), is obtained. The following compds. are similarly prepd.: N-propyl-9-aza-3-bicyclo[3.3.1]nonyl benzhydryl ether-HCl [from 4.6 g. N-propylgranatoline (VI), 7.64 g. II, and 4.64 g. III in 67.0% yield], m. 178-81° (iso-BuOAc); N-propyl-9-aza-3-bicyclo[3.3.1]nonyl p-chlorobenzhydryl ether-HCl (from 4.6 g. VI, and a total of 17.6 g. p-chlorobenzhydryl chloride and 9.28 g. III in 78.4% yield), m. 171-3° (abs. xylene); N-isopropyl-9-aza-3-bicyclo[3.3.1]nonyl benzhydryl ether-HBr (from 4.58 g. N-isopropylgranatoline, and a total of 12.95 g. IV and 6.96 g. III in 68.8% yield), m. 222-3° (MeCN); N-butyl-9-aza-3-bicyclo[3.3.1]nonyl benzhydryl ether-HCl (from 4.95 g. N-butylgranatoline, 7.64 g. II, and 4.64 g. III in 77.2% yield), m. 171-3° (EtOAc); N-amyl-9-aza-3-bicyclo[3.3.1]nonyl benzhydryl ether-HCl (from 5.3 g. N-amylgranatoline, 7.64 g. II, and 4.64 g. III in 48% yield), m. 186-8° (EtOAc); N-propyl-10-aza-3-bicyclo[3.4.1]decyl benzhydryl ether-HBr (from 7.15 g. N-propylhomogranatoline, 9.8 g. IV, and 6.96 g. III in 44% yield), m. 186-8° (EtOAc); and N-methyl-9-aza-3-bicyclo[3.3.1]nonyl benzhydryl ether-HCl (from 3.88 g. N-methylgranatoline, 7.64 g. II, and 4.64 g. III in 61% yield), m. 190-2° (iso-BuOAc). All the compds. are white, except as otherwise noted. The free bases may be prepd. by evapn. of an org. solvent ext. of the alk. soln. of the salts.

IT 102953-94-6P, Nortropane, 3α-diphenylmethoxy-8-isopentyl-, hydrobromide 119112-58-2P, Nortropane, 8-isopentyl-3α-(p-methoxy-α-phenylbenzyloxy)-, hydrochloride
RL: PREP (Preparation)
(preparation of)

RN 102953-94-6 CAPLUS

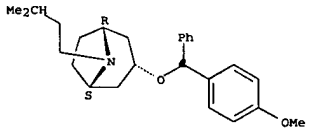
L4 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
CN Nortropane, 3-diphenylmethoxy-8-isopentyl-, hydrobromide (6CI) (CA INDEX NAME)



● HBr

RN 119112-58-2 CAPLUS
CN Nortropane, 8-isopentyl-3α-(p-methoxy-α-phenylbenzyloxy)-, hydrochloride (6CI) (CA INDEX NAME)

Relative stereochemistry.



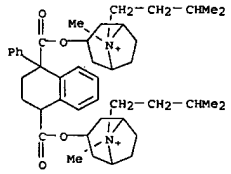
● HCl

L4 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

L4 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1959:94919 CAPLUS
DOCUMENT NUMBER: 53:94919
ORIGINAL REFERENCE NO.: 53:17166f-h
TITLE: Quaternary salts with curarelike activity
INVENTOR(S): Hotovy, Rudolf; Jacobi, Ernst; Kussner, Willi
PATENT ASSIGNEE(S): Emanuel Merck Chemische Fabrik
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 912221		19540528	DE	

AB The reaction of belladonnine (I) [obtained from l-hyoscyamine or atropine, but preferably by prolonged heating of apoatropine (II) (Kussner, C.A. 33, 39668), or by esterification of isatropic acid or atrolactic acid with atropine or pseudotropine] or its preliminary stages with 0.5-2 moles alkylating agent, particularly an alkyl or aralkyl halide/N atom, with possibly simultaneous or subsequent conversion of the preliminary stages gave quaternary salts of I. These had a similar action to d-tubocurarine, but were tolerated in a 100-fold head-drop dose and did not cause bronchospasm in curative doses. The following I salts were prepared: di-MeI salt, C36H48O4N2I2.0.5H2O, m. 290° (H2O), E1%1cm. 6.6 at 258 mμ, 6 at 261 mμ; di-EtI salt, m. 286°, E 6.35 at 258, 5.8 at 262 mμ; EtBr salt, m. 243-4°, E 6.0 and 5.8 at 259 and 262 mμ; di-EtBr salt-4H2O, m. 98-101° (Me2CO-H2O). E 4.8 at 258 and 261 mμ; diiso-AmI salt, m. 234-6°, E 4.8 at 259 mμ; di-PhCH2Cl salt, E 11.3 at 258 and 261 mμ; methosulfate, m. 124-6°, E 5.3 at 258 and 261 mμ. The ultraviolet absorption spectra of the iodine-containing compds. were veiled by the presence of iodine.
IT 123885-30-3P, N,N'-Diisopentylbelladonninium diiodide
RL: PREP (Preparation)
(preparation of)
RN 123885-30-3 CAPLUS
CN N,N'-Diisopentylbelladonninium diiodide (6CI) (CA INDEX NAME)

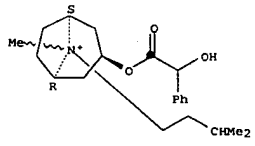


●2 I⁻

L4 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

L4 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1957:68005 CAPLUS
DOCUMENT NUMBER: 51:68005
ORIGINAL REFERENCE NO.: 51:12348h-i,12349a
TITLE: Relations between constitution and pharmacological activity in tropeines and their quaternary derivatives, especially N-octylatropinium bromide
AUTHOR(S): Engelhardt, Albrecht; Wick, Helmut
SOURCE: Arzneimittel-Forschung (1957), 7, 217-22
CODEN: ARZNAD; ISSN: 0004-4172
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
AB A large number of tropine esters quaternized with alkyl radicals from C1 to C12 has been studied for pharmacol. activity. Esters of benzoic, mandelic, xanthene-9-carboxylic, benzilic, and tropic acids and a variety of similar compds. (altogether over 120 compds.) were tested. The spasmolytic effect is increased in compds. quaternized with alkyls C6-C10 whereas the mydriatic effect is reduced. The most promising derivative is N-octylatropinium bromide (I) which has L.D.50 i.v. 10.0, s.c. 335 and oral 380 mg./kg. in the white mouse, less than 1/2 that of atropine sulfate. The pharmacol. properties of I are described in detail.
IT 115273-17-1
(Derived from data in the 6th Collective Formula Index (1957-1961))
RN 115273-17-1 CAPLUS
CN 8-Isopentylhomatropinium bromide (6CI) (CA INDEX NAME)

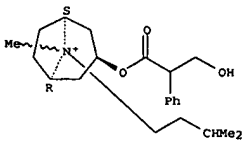
Relative stereochemistry.



● Br⁻

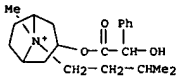
IT 124144-54-3, 8-Isopentylatropinium bromide 856633-33-5, Homatropinium, 8-isopentyl-, bromide
(pharmacol. of)
RN 124144-54-3 CAPLUS
CN 8-Isopentylatropinium bromide (6CI) (CA INDEX NAME)

Relative stereochemistry.



● Br⁻

RN 856633-33-5 CAPLUS
CN Homatropinium, 8-isopentyl-, bromide (6CI) (CA INDEX NAME)



● Br⁻

```
=> d his

     (FILE 'HOME' ENTERED AT 11:58:09 ON 30 JAN 2008)

     FILE 'REGISTRY' ENTERED AT 11:58:31 ON 30 JAN 2008
L1              STRUCTURE UPLOADED
L2            0 S L1
L3           22 S L1 FULL

     FILE 'CAPLUS' ENTERED AT 11:59:03 ON 30 JAN 2008
L4            9 S L3 FULL

=> log y
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                    50.49     229.06

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                    -7.20      -7.20

STN INTERNATIONAL LOGOFF AT 12:01:00 ON 30 JAN 2008
```

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSPTANXR1625

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS 1		Web Page for STN Seminar Schedule - N. America
NEWS 2	AUG 06	CAS REGISTRY enhanced with new experimental property tags
NEWS 3	AUG 06	FSTA enhanced with new thesaurus edition
NEWS 4	AUG 13	CA/CAplus enhanced with additional kind codes for granted patents
NEWS 5	AUG 20	CA/CAplus enhanced with CAS indexing in pre-1907 records
NEWS 6	AUG 27	Full-text patent databases enhanced with predefined patent family display formats from INPADOCDB
NEWS 7	AUG 27	USPATOLD now available on STN
NEWS 8	AUG 28	CAS REGISTRY enhanced with additional experimental spectral property data
NEWS 9	SEP 07	STN AnaVist, Version 2.0, now available with Derwent World Patents Index
NEWS 10	SEP 13	FORIS renamed to SOFIS
NEWS 11	SEP 13	INPADOCDB enhanced with monthly SDI frequency
NEWS 12	SEP 17	CA/CAplus enhanced with printed CA page images from 1967-1998
NEWS 13	SEP 17	CAplus coverage extended to include traditional medicine patents
NEWS 14	SEP 24	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS 15	OCT 02	CA/CAplus enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS 16	OCT 19	BEILSTEIN updated with new compounds
NEWS 17	NOV 15	Derwent Indian patent publication number format enhanced
NEWS 18	NOV 19	WPIX enhanced with XML display format
NEWS 19	NOV 30	ICSD reloaded with enhancements
NEWS 20	DEC 04	LINPADOCDB now available on STN
NEWS 21	DEC 14	BEILSTEIN pricing structure to change
NEWS 22	DEC 17	USPATOLD added to additional database clusters
NEWS 23	DEC 17	IMSDRUGCONF removed from database clusters and STN
NEWS 24	DEC 17	DGENE now includes more than 10 million sequences
NEWS 25	DEC 17	TOXCENTER enhanced with 2008 MeSH vocabulary in MEDLINE segment
NEWS 26	DEC 17	MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary
NEWS 27	DEC 17	CA/CAplus enhanced with new custom IPC display formats
NEWS 28	DEC 17	STN Viewer enhanced with full-text patent content from USPATOLD
NEWS 29	JAN 02	STN pricing information for 2008 now available
NEWS 30	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS 31	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS 32	JAN 28	MARPAT searching enhanced
NEWS 33	JAN 28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS 34	JAN 28	TOXCENTER enhanced with reloaded MEDLINE segment
NEWS 35	JAN 28	MEDLINE and LMEDLINE reloaded with enhancements

NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2,

CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 11:53:10 ON 30 JAN 2008

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 11:53:20 ON 30 JAN 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 29 JAN 2008 HIGHEST RN 1001040-86-3
DICTIONARY FILE UPDATES: 29 JAN 2008 HIGHEST RN 1001040-86-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

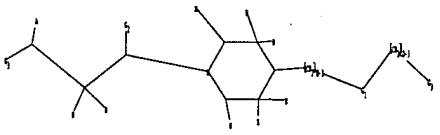
TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

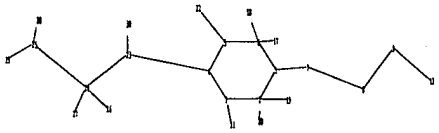
Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

=>
Uploading C:\Program Files\Stnexp\Queries\10539859.str





chain nodes :
7 8 9 12 17 18 19 20 21 22 23 24 25 26 27 28 29 30
ring nodes :
1 2 3 4 5 6
chain bonds :
1-7 2-19 2-20 3-21 4-23 5-22 6-17 6-18 7-8 8-9 9-12 23-24 23-30 24-25 24-26 24-27 25-28 25-29
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
1-2 1-6 2-3 3-4 4-5 4-23 5-6 7-8 8-9 9-12 23-30 25-28 25-29
exact bonds :
1-7 2-19 2-20 3-21 5-22 6-17 6-18 23-24 24-25 24-26 24-27
isolated ring systems :
containing 1 :

G1:O,S

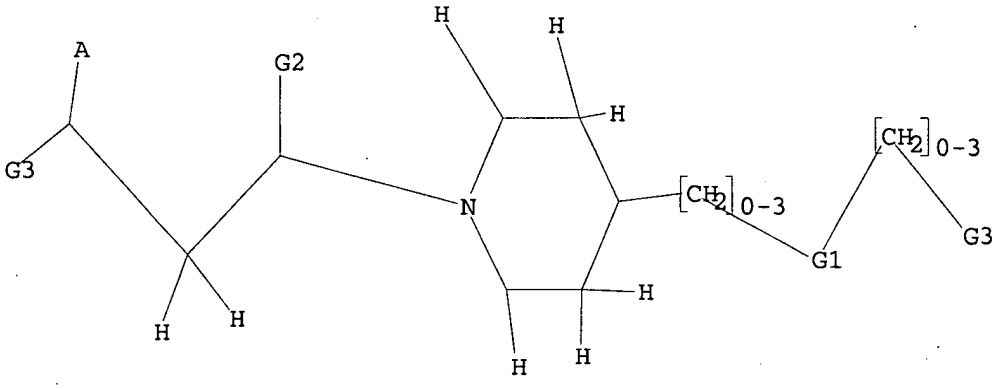
G2:H,Ak

G3:Cy,Ak

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 12:CLASS 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



G1 O,S

G2 H,Ak

G3 Cy,Ak

Structure attributes must be viewed using STN Express query preparation.

=> s l1
SAMPLE SEARCH INITIATED 11:53:38 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 38373 TO ITERATE

5.2% PROCESSED 2000 ITERATIONS 0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 755755 TO 779165
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 full
FULL SEARCH INITIATED 11:53:43 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 767538 TO ITERATE

100.0% PROCESSED 767538 ITERATIONS 251 ANSWERS
SEARCH TIME: 00.00.14

L3 251 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 178.36 178.57

FILE 'CAPLUS' ENTERED AT 11:54:02 ON 30 JAN 2008

FILE COVERS 1907 - 30 Jan 2008 VOL 148 ISS 5
FILE LAST UPDATED: 29 Jan 2008 (20080129/ED)

=> s l3 full
L4 60 L3

=> d ibib abs hitstr tot

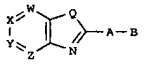
L4 ANSWER 1 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:671975 CAPLUS
DOCUMENT NUMBER: 147:95654
TITLE: Benzoxazole derivatives and related compounds as CETP inhibitors and their preparation, pharmaceutical composition and use for raising HDL and reducing LDL cholesterol and treatment of atherosclerosis
INVENTOR(S): Ali, Amjad; Hunt, Julianne A.; Kallashi, Florida; Kowalchick, Jennifer E.; Kim, Dooseop; Smith, Cameron J.; Sinclair, Peter J.; Sweis, Ramzi F.; Taylor, Gayle E.; Thompson, Christopher F.; Chen, Liya; Quraishi, Nazia
PATENT ASSIGNEE(S): Merck & Co., Inc., USA
SOURCE: PCT Int. Appl., 294pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

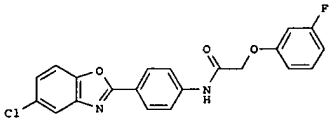
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007070173	A2	20070621	WO 2006-US42208	20061030
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: US 2005-732168P P 20051031

OTHER SOURCE(S): MARPAT 147:95654
GI



I



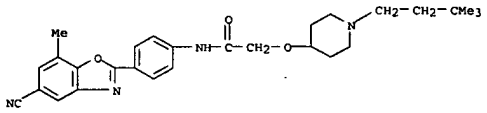
II

L4 ANSWER 1 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

AB Compds. of formula I, including pharmaceutically acceptable salts of the compds., are CETP inhibitors, and are useful for raising HDL-cholesterol, reducing LDL-cholesterol, and for treating or preventing atherosclerosis. Compds. of formula I wherein three of the W, X, Y and Z are (un)substituted =CH, and the forth one of W, X, Y and Z is =CH, =N, and =NO; Q is O, S, CH=N, and NH and derivs., where the carbon of the CH=N is attached to the 6-membered ring; A is difunctional cyclic group; B is carbonylamino, alkoxycarbonylamino, amino, alkoxy, alkylthio, etc.; and their pharmaceutically acceptable salts thereof, are claimed. Example compound II was prepared by etherification of 2-bromo-N-[4-(5-chloro-1,3-benzoxazol-2-yl)phenyl]acetamide with 3-fluorophenol. All the invention compds. were evaluated for their CETP inhibitory activity.

IT 942210-46-0P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of benzoxazole derivs. and related compds. as CETP inhibitors useful for raising HDL cholesterol, lowering LDL cholesterol and treatment of atherosclerosis)

RN 942210-46-0 CAPLUS
CN Acetamide, N-[4-(5-cyano-7-methyl-2-benzoxazolyl)phenyl]-2-[[1-(3,3-dimethylbutyl)-4-piperidinyl]oxy]- (CA INDEX NAME)



L4 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

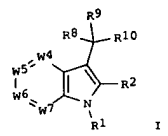
ACCESSION NUMBER: 2007:410811 CAPLUS
DOCUMENT NUMBER: 146:421837
TITLE: Preparation of fused pyrrole derivatives as GR modulators
INVENTOR(S): Sone, Toshihiko; Sawaki, Rieko; Nakajima, Tomoko
PATENT ASSIGNEE(S): Dainippon Sumitomo Pharma Co., Ltd., Japan
SOURCE: PCT Int. Appl., 403pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007040166	A1	20070412	WO 2006-JP319426	20060929
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

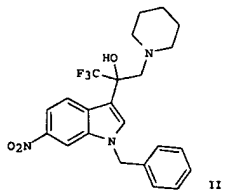
PRIORITY APPLN. INFO.: JP 2005-286576 A 20050930

OTHER SOURCE(S): MARPAT 146:421837
GI

L4 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



I

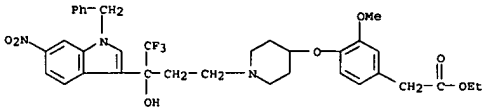


II

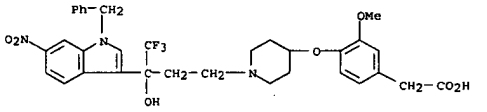
AB Title compds. I [R1 = H, (un)substituted alkyl, (un)substituted alkenyl, etc.; R2 = H, halo, carboxyl, etc.; -W4:W5-W6:W7- = -CR4:CR5-CR6:CR7-, -N:CR5-CR6:CR7-, -CR4:N-CR6:CR7-, etc.; R4-R7 = -E-A; E = single bond, -O-, -CO-, etc.; when E is a single bond, A is H, halo, cyano, etc.; when E is -O-, -CO-, etc., A is H, (un)substituted alkyl, (un)substituted cycloalkyl, etc.; R8 = -OR11, -SR11, -N(R11)R12; R11, R12 = H, (un)substituted alkyl; R9 = alkyl substituted with halo, cycloalkyl substituted with halo; R10 = -[C(R13)R14]n-R15; R13, R14 = H, alkyl, halo; R13 and R14 may combine to form a oxo group; or R13 and R14, together with the carbon atom to which they are attached, form a cycloalkane (one or two -CH2- in cycloalkane may be replaced with -NH-, -S-, -S(:O)-, etc.); n = 0-10; R15 = hydroxy, (un)substituted alkyl, (un)substituted alkenyl, etc.], prodrugs or pharmaceutically acceptable salts were prepared For example, reaction of 1-(1-benzyl-6-nitro-1H-indol-3-yl)-2,2,2-trifluoroethanone, e.g., prepared from 6-nitroindole in 2 steps, with trimethylphosphonium iodide followed by treatment with piperidine afforded compound II. In glucocorticoid receptor (GR) binding assays, compound II exhibited the inhibitory activity of 92% at 100 nM. Compds. I are claimed useful for the treatment of inflammation and diabetes.

IT 934226-31-0P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of fused pyrrole derivs. as GR modulators for treatment of

L4 ANSWER 2 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
inflammation and diabetes)
RN 934226-31-0 CAPLUS
CN Benzeneacetic acid,
3-methoxy-4-[[1-[4,4,4-trifluoro-3-hydroxy-3-[6-nitro-
1-(phenylmethyl)-1H-indol-3-yl]butyl]-4-piperidinyl]oxy]-, ethyl ester
(CA INDEX NAME)



IT 934226-32-1P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
(preparation of fused pyrrole derivs. as GR modulators for treatment
of
inflammation and diabetes)
RN 934226-32-1 CAPLUS
CN Benzeneacetic acid,
3-methoxy-4-[[1-[4,4,4-trifluoro-3-hydroxy-3-[6-nitro-
1-(phenylmethyl)-1H-indol-3-yl]butyl]-4-piperidinyl]oxy]- (CA INDEX
NAME)



REFERENCE COUNT: 51 THERE ARE 51 CITED REFERENCES AVAILABLE FOR
THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L4 ANSWER 3 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:116017 CAPLUS
DOCUMENT NUMBER: 146:206218
TITLE: Preparation of piperidinyl isoquinolone derivatives
as
Rho-kinase inhibitors
INVENTOR(S): Plettenburg, Oliver; Hofmeister, Armin; Kadereit,
Dieter; Brendel, Joachim; Loehn, Matthias
PATENT ASSIGNEE(S): Sanofi-Aventis Deutschland G.m.b.H., Germany
SOURCE: PCT Int. Appl., 155pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007012421	A1	20070201	WO 2006-EP7139	20060720
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

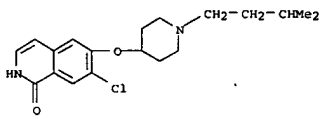
PRIORITY APPLN. INFO.: EP 2005-16154 A 20050726

OTHER SOURCE(S): MARPAT 146:206218
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

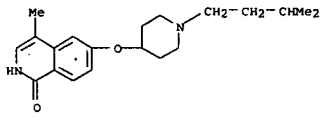
AB The title compds. I or II [R1 = H, alkyl, alkenyl, etc.; R2 = H, alkyl, (alkylene)alkyl, etc.; R3 = H, halo, CN, etc.; R4 = H, halo, OH, etc.; R5 = H, halo, CN, etc.; R6 = H, alkyl, cycloalkyl, etc.; R7, R8 = H, halo, CN, etc.; R9 = halo or alkyl; n = 0-4; L = O or O(alkylene)], useful for the treatment and/or prevention of diseases associated with Rho-kinase and/or
Rho-kinase mediated phosphorylation of myosin light chain phosphatase, were prepared E.g., a multi-step synthesis of III.HCl, starting from 4-fluorobenzaldehyde, was given. Compds. I were tested for their Rho kinase inhibition (data given for representative compds. I and II). Pharmaceutical comps. containing compds. I or II are disclosed.
IT 923263-63-2P 923263-86-9P 923264-06-6P
923264-22-6P 923264-60-2P 923264-68-0P
923265-00-3P 923265-47-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of piperidinyl isoquinolone derivs. as Rho-kinase inhibitors
useful in treatment and prevention of Rho-kinase associated diseases)

L4 ANSWER 3 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
RN 923263-63-2 CAPLUS
CN 1(2H)-Isoquinolinone, 7-chloro-6-[[1-(3-methylbutyl)-4-piperidinyl]oxy]-,
hydrochloride (1:1) (CA INDEX NAME)



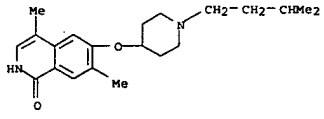
● HCl

RN 923263-86-9 CAPLUS
CN 1(2H)-Isoquinolinone, 4-methyl-6-[[1-(3-methylbutyl)-4-piperidinyl]oxy]-,
hydrochloride (1:1) (CA INDEX NAME)



● HCl

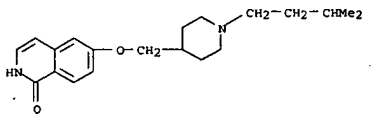
RN 923264-06-6 CAPLUS
CN 1(2H)-Isoquinolinone, 4,7-dimethyl-6-[[1-(3-methylbutyl)-4-
piperidinyl]oxy]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

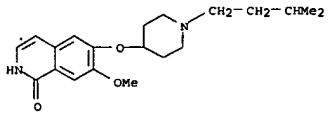
RN 923264-22-6 CAPLUS
CN 1(2H)-Isoquinolinone, 6-[[1-(3-methylbutyl)-4-piperidinyl]methoxy]-,
hydrochloride (1:1) (CA INDEX NAME)

L4 ANSWER 3 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



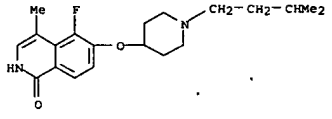
● HCl

RN 923264-60-2 CAPLUS
CN 1(2H)-Isoquinolinone,
7-methoxy-6-[[1-(3-methylbutyl)-4-piperidinyl]oxy]-,
hydrochloride (1:1) (CA INDEX NAME)



● HCl

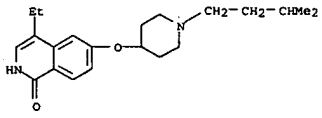
RN 923264-68-0 CAPLUS
CN 1(2H)-Isoquinolinone, 5-fluoro-4-methyl-6-[[1-(3-methylbutyl)-4-
piperidinyl]oxy]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

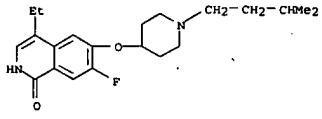
RN 923265-00-3 CAPLUS
CN 1(2H)-Isoquinolinone, 4-ethyl-6-[[1-(3-methylbutyl)-4-piperidinyl]oxy]-,
hydrochloride (1:1) (CA INDEX NAME)

L4 ANSWER 3 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



● HCl

RN 923265-47-8 CAPLUS
CN 1(2H)-Isoquinolinone, 4-ethyl-7-fluoro-6-[[1-(3-methylbutyl)-4-piperidinyl]oxy]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L4 ANSWER 4 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

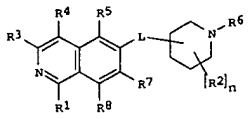
ACCESSION NUMBER: 2007:11285 CAPLUS
DOCUMENT NUMBER: 146:121845
TITLE: Preparation of piperidinyl substituted isoquinoline derivatives as inhibitors of Rho-kinase
INVENTOR(S): Plettenburg, Oliver; Hofmeister, Armin; Kadereit, Dieter; Peukert, Stefan; Ruf, Sven; Ritter, Kurt; Loehn, Matthias; Ivashchenko, Yuri; Monecke, Peter; Dreyer, Matthias; Kannt, Aimo
PATENT ASSIGNEE(S): Sanofi-Aventis Deutschland G.m.b.H., Germany
SOURCE: PCT Int. Appl., 172pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007000240	A1	20070104	WO 2006-EP5648	20060613

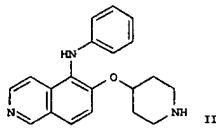
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: EP 2005-13868 A 20050628

OTHER SOURCE(S): MARPAT 146:121845
GI



I



II

L4 ANSWER 4 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

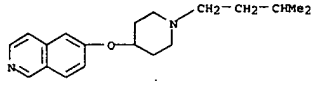
AB The title compds. I [R1 = H, alkyl, NH(alkyl), N(alkyl)2, etc.; R2 = H, halo, alkyl; R3 = H, halo, alkyl, etc.; R4 = H, halo, OH, etc.; R5 = H, halo, CN, etc.; R6 = H, alkyl, alkylenealkoxy, etc.; R7 = H, halo, CN, etc.; R8 = H, halo, alkyl; n = 1-4; L = O, O-alkylene], useful for the treatment and/or prevention of diseases associated with Rho-kinase and/or Rho-kinase mediated phosphorylation of myosin light chain phosphatase, were prepared E.g., a multi-step synthesis of II.TFA, starting from 6-hydroxyisoquinoline, was given. Compds. I were tested for Rho-kinase inhibition (data were given for representative compds. I).

IT 918490-08-1P 918490-10-5P 918491-62-0P
918491-82-4P 918492-23-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of piperidinyl-substituted isoquinoline derivs. as RHO-kinase
inhibitors useful in treatment and prevention of diseases)

RN 918490-08-1 CAPLUS
CN Isoquinoline, 6-[[1-(3-methylbutyl)-4-piperidinyl]oxy]-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 918490-07-0
CMF C19 H26 N2 O



CM 2

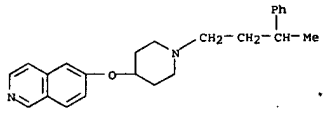
CRN 76-05-1
CMF C2 H F3 O2

RN 918490-10-5 CAPLUS
CN Isoquinoline, 6-[[1-(3-phenylbutyl)-4-piperidinyl]oxy]-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 918490-09-2
CMF C24 H28 N2 O

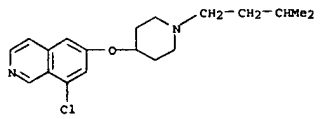
L4 ANSWER 4 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



CM 2

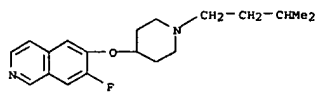
CRN 76-05-1
CMF C2 H F3 O2

RN 918491-62-0 CAPLUS
CN Isoquinoline, 8-chloro-6-[[1-(3-methylbutyl)-4-piperidinyl]oxy]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

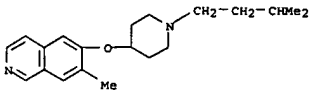
RN 918491-82-4 CAPLUS
CN Isoquinoline, 7-fluoro-6-[[1-(3-methylbutyl)-4-piperidinyl]oxy]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

L4 ANSWER 4 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 918492-23-6 CAPLUS
CN Isoquinoline, 7-methyl-6-[[1-(3-methylbutyl)-4-piperidinyl]oxy]-, hydrochloride (1:1) (CA INDEX NAME)



● HCl

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L4 ANSWER 5 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

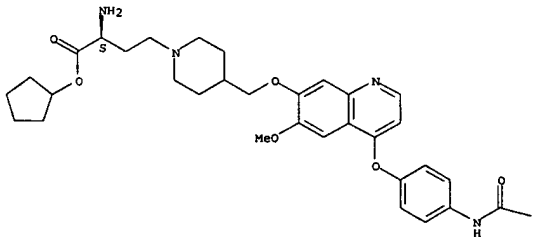
quinoline deriv. I was prepd. by a multistep sequence, including etherification of 4-chloro-6-methoxy-7-quinolinol with (S)-4-bromo-2-(tert-butoxycarbonylamino)butyric acid cyclopentyl ester, followed by reaction with N-(4-mercaptophenyl)benzamide. Compd. I showed IC50 < 2,000 nM in the aurora-A inhibition assay and IC50 < 1,000 nM for inhibition of cancer cell lines U937, HCT 116 and HUT.

IT 914489-65-9P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of quinoline and quinazoline amino acid derivs. as inhibitors of kinase enzymic activity)

RN 914489-65-9 CAPLUS
CN 1-Piperidinebutanoic acid, α-amino-4-[[[4-[4-(benzoylamino)phenoxy]-6-methoxy-7-quinolinyl]oxy]methyl]-, cyclopentyl ester, (αS)- (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



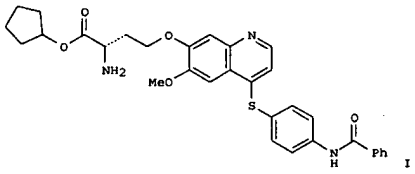
L4 ANSWER 5 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1176345 CAPLUS
DOCUMENT NUMBER: 145:489566
TITLE: Preparation of quinoline and quinazoline amino acid derivatives as inhibitors of kinase enzymatic activity
INVENTOR(S): Davidson, Alan Hornsby; Davies, Stephen John; Moffat, David Festus Charles
PATENT ASSIGNEE(S): Chroma Therapeutics Ltd., UK
SOURCE: PCT Int. Appl., 205pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006117552	A1	20061109	WO 2006-GB1609	20060504
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
EP 1877383	A1	20080116	EP 2006-726986	20060504
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				

PRIORITY APPLN. INFO.: GB 2005-9227 A 20050505
WO 2006-GB1609 W 20060504

OTHER SOURCE(S): MARPAT 145:489566
GI



I

AB The invention relates to quinoline and quinazoline linker-attached amino acid derivs. which are inhibitors of kinase enzymic activity. Thus,

L4 ANSWER 5 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 1-B

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L4 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

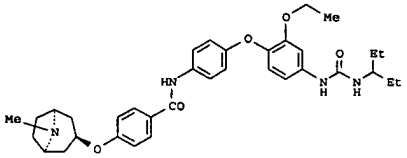
ACCESSION NUMBER: 2006:1097510 CAPLUS
DOCUMENT NUMBER: 145:438420
TITLE: Preparation of N-[[(ureido)phenoxy]hetero/aryl]benzamides and related derivatives as NPY antagonists and their use for treating obesity, and abnormal food behavior and for controlling food intake
INVENTOR(S): Botez, Iuliana; David-Basei, Christelle; Gourlaouen, Nelly; Nicolaie, Eric; Balavoine, Fabrice; Valette, Gerard; Serradeil-Le Gal, Claudine
PATENT ASSIGNEE(S): Cerep, Fr.
SOURCE: PCT Int. Appl., 430pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006108965	A2	20061019	WO 2006-FR829	20060414
WO 2006108965	A3	20070329		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
FR 2884516	A1	20061020	FR 2005-3795	20050415
FR 2884516	B1	20070622		
AU 2006234413	A1	20061019	AU 2006-234413	20060414
CA 2604773	A1	20061019	CA 2006-2604773	20060414
EP 1879887	A2	20080123	EP 2006-743700	20060414
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				

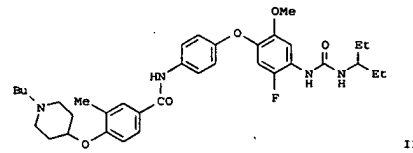
PRIORITY APPLN. INFO.: FR 2005-3795 A 20050415
WO 2006-FR829 W 20060414

OTHER SOURCE(S): MARPAT 145:438420
GI

L4 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



II



III

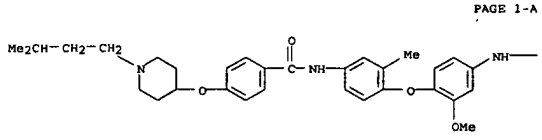
AB Title compds. R8R9N-L3-A-Ar3(R5R6)-L2-Ar2(R3R4)-L1-Ar1(R1R2)-Z-C(:Y)-X [I; X = di/alkylamino, hydrazino; Z = O, NH; Ar1 = Ph; Y = O, S; or Y = N, in which case Y, Z, and the Ph to which Z is attached form a benzimidazole or benzoxazole ring; R1, R2 = independently H, halo, OH, etc.; L1 = O, S, alkylene; Ar2 = hetero/aryl, heterocyclyl; R3 = independently H, halo, OH, CF3, OCF3, etc.; R1R2Ar1L1Ar2 = tricycle in which R1R3 = alkylene, L1 = O, S, and Ar2 = Ph; L2 = CONH and derivs., CH2O, OCH2, a bond with provisos; Ar3 = hetero/aryl, heterocyclyl; when L2 = a bond, Ar3 and Ar2 cannot be simultaneously heteroaryl or heterocyclyl; R5, R6 = independently H, halo, OH, alkyl, etc.; A = a bond, O, alkyl(id)ene, CONH, etc. L3 = (un)substituted cyclo/alkylene, bicyclo or polycycloalkyl(id)ene, etc. with proviso; or L3AAr3 = O heterocycle; R8, R9 = independently H, NH2, alkoxy/cyclo/alkyl, heterocyclyl, etc.; or NR8R9 = mono or poylcyclic N heterocycle; including quaternary ammonium compds. containing N+R8R9R10; R10 = alkyl; with provisos; and their pharmaceutically acceptable salts, solvates and hydrates, optical and geometrical isomers and their mixts.] were prepared as neuropeptide Y (NPY) antagonists, particularly selective NPY Y1 subtype antagonists, and their use in therapeutic or prophylactic treatment all NPY involving disorders. Pharmaceutical comps. comprising I and treating methods using them are also disclosed. Thus, II, isolated as HCl salt, was prepared by reacting tropine with 4-fluorobenzonitrile, followed by nitrile hydrolysis, activation of the acid in the presence of TBTU/HOBT in DMF, and reaction with 1-[4-(4-aminophenoxy)-3-ethoxyphenyl]-3-(1-ethylpropyl)urea. III bound specifically to NPY Y1 receptor (IC50 for neuropeptide Y1, Y2, Y4, and Y5 receptors = 1.80 nM, > 10,000 nM, 2620 NM, and > 10,000 nM, resp.). In a test measuring the effects of III on arterial hypertension induced by [Leu31,Pro34]NPY in anesthetized rats, 3 mg/kg III administered orally reduced the blood pressure by .apprx.10 mm Hg after 1.5 h. I are useful for treating diseases characterized by elevated neuropeptide Y activity such as obesity, and abnormal food behavior, and for controlling food intake.

L4 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

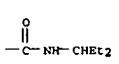
IT 912945-17-6P, N-[4-[4-[3-(1-Ethylpropyl)ureido]-2-methoxyphenoxy]-3-methylphenyl]-4-[[1-(3-methylbutyl)piperidin-4-yl]oxy]benzamide 912945-27-8P, N-[4-[4-[3-(1-Ethylpropyl)ureido]-2-methoxyphenoxy]phenyl]-4-[[1-(3-methylbutyl)piperidin-4-yl]oxy]benzamide 912945-51-8P, N-[4-[4-[3-(1-Ethylpropyl)ureido]phenoxy]-3-methylphenyl]-4-[[1-(3-methylbutyl)piperidin-4-yl]oxy]benzamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of NPY antagonists and their use for treating obesity, and abnormal food behavior and for controlling food intake)

RN 912945-17-6 CAPLUS
CN Benzamide, N-[4-[4-[[[(1-ethylpropyl)amino]carbonyl]amino]-2-methoxyphenoxy]-3-methylphenyl]-4-[[1-(3-methylbutyl)-4-piperidinyl]oxy]- (CA INDEX NAME)

PAGE 1-A

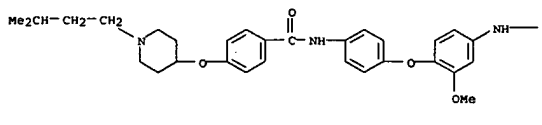


PAGE 1-B



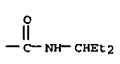
RN 912945-27-8 CAPLUS
CN Benzamide, N-[4-[4-[[[(1-ethylpropyl)amino]carbonyl]amino]-2-methoxyphenoxy]phenyl]-4-[[1-(3-methylbutyl)-4-piperidinyl]oxy]- (CA INDEX NAME)

PAGE 1-A



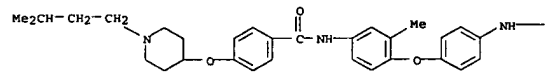
L4 ANSWER 6 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 1-B

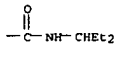


RN 912945-51-8 CAPLUS
CN Benzamide, N-[4-[4-[[[(1-ethylpropyl)amino]carbonyl]amino]phenoxy]-3-methylphenyl]-4-[[1-(3-methylbutyl)-4-piperidinyl]oxy]- (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



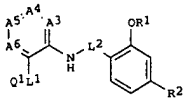
L4 ANSWER 7 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:510615 CAPLUS
DOCUMENT NUMBER: 145:27861
TITLE: Preparation of (hetero)aromatic ether amides as inhibitors of Factor Xa and/or thrombin.
INVENTOR(S): Argade, Ankush Baburao; Goodson, Theodore, Jr.; Herron, David Kent; Joseph, Sajan; Lepore, Salvatore Donato; Marquart, Angela Lynn; Masters, John Joseph; Mendel, David; Merritt, Leander; Ratz, Andrew Michael; Smith, Gerald Floyd; Tebbe, Anne Louise; Wiley, Michael Robert; Yee, Ying Kwong
PATENT ASSIGNEE(S): Eli Lilly and Company, USA
SOURCE: PCT Int. Appl., 348 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006057845	A1	20060601	WO 2005-US41161	20051110
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
EP 1817287	A1	20070815	EP 2005-851607	20051110
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				

PRIORITY APPLN. INFO.: US 2004-630984P P 20041124
WO 2005-US41161 W 20051110

OTHER SOURCE(S): MARPAT 145:27861
GI

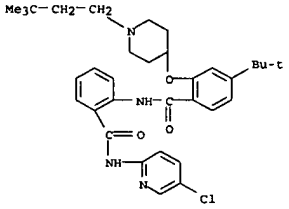


I

AB Title compds. [I; A3 = CR3; A4 = CR4; A5 = CR5; A6 = CR6; R3 = H, Me, F, Cl, CO2H; 1 of R4, R5 = H, alkyl, halo, cyano, CF3, OCF3, NO2, hydroxyalkoxy, etc., the other of R4, R5 = H; R6 = H, Me, F, Cl, MeO; L1 = CONH, SO2NH; Q1 = (substituted) Ph, 5-6 membered heteroaryl; L1Q1 = (4-methyl-substituted) piperazinocarbonyl; L12 = CO, CH2; R1 = (CH2)iQ(CH2)jNRaRb; Q = bond, i+j = 2-4, or Q = O, i, j = 2; or Q = CHMe, CMe2, CH(OH), i, j = 1; etc.; Ra = H, Rd; Rb = H, alkyl; NRaRb = azetidin-1-yl, pyrrolidin-1-yl, thiazolidin-3-yl, piperidin-1-yl, morpholin-4-yl, hexahydroazepin-1-yl, etc.; Rd = (substituted) alkyl; R2 = F, Cl, H2NCH2, 1-aminoethyl, 1-amino-1-methylethyl, etc.], were prepd. Thus, N-(4-chlorophenyl)-2-[4-(dimethylamino)-2-(piperidin-4-yloxy)benzoylamino]benzamide was prepd. from 2-hydroxy-4-dimethylaminobenzoic acid, 4-hydroxypiperidine, isatoic anhydride, and 4-chloroaniline. In general, I exhibit an assocn. const. Kass for Factor Xa of 0.1-1000 + 106 L/mol or greater.

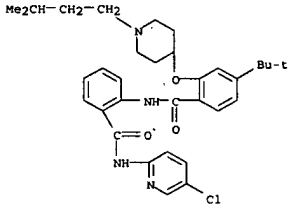
IT 889120-47-2P 889120-51-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of (hetero)aromatic ether amides as inhibitors of Factor Xa and/or thrombin)

RN 889120-47-2 CAPLUS
CN Benzamide, N-[2-[[(5-chloro-2-pyridinyl)amino]carbonyl]phenyl]-2-[[1-(3,3-dimethylbutyl)-4-piperidinyl]oxy]-4-(1,1-dimethylethyl)- (CA INDEX NAME)



RN 889120-51-8 CAPLUS
CN Benzamide, N-[2-[[(5-chloro-2-pyridinyl)amino]carbonyl]phenyl]-4-(1,1-dimethylethyl)-2-[[1-(3-methylbutyl)-4-piperidinyl]oxy]- (CA INDEX NAME)

L4 ANSWER 7 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

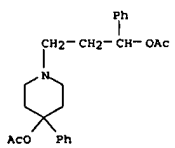
L4 ANSWER 8 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:274154 CAPLUS
DOCUMENT NUMBER: 144:343073
TITLE: QSAR study of 4-phenylpiperidine derivatives as μ opioid agonists by neural network method
AUTHOR(S): Wang, Xing-Hai; Tang, Yun; Xie, Qiong; Qiu, Zhui-Bai
CORPORATE SOURCE: Department of Medicinal Chemistry, School of Pharmacy, Fudan University, Shanghai, 200032, Peop. Rep. China
SOURCE: European Journal of Medicinal Chemistry (2006), 41(2), 226-232
CODEN: EJMCA5; ISSN: 0223-5234
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A nonlinear QSAR study was conducted on a series of 4-phenylpiperidine derivs. (4PPs) acting as μ opioid agonists by three-layer back-propagation neural network (NN) method. At first a variety of mol. descriptors were calculated and then selected with two-stage least squares combining partial least squares (PLS) method. The selected four mol. descriptors, out of 292 ones, were correlated with the known analgesic activities of 38 4PPs by NN method. The established QSAR model was further validated by five addnl. 4PPs, as an external testing set. Moreover, a pharmacophore model was hypothesized based on the results, which would be helpful for structural optimization of 4PPs.

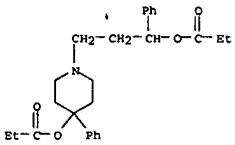
IT 116606-71-4 124119-22-8
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(QSAR study of 4-phenylpiperidine derivs. as μ opioid agonists by neural network method)

RN 116606-71-4 CAPLUS
CN 1-Piperidinepropanol, 4-(acetyloxy)-α,4-diphenyl-, acetate (ester) (9CI) (CA INDEX NAME)



RN 124119-22-8 CAPLUS
CN 1-Piperidinepropanol, 4-(1-oxopropoxy)-α,4-diphenyl-, propanoate (ester) (9CI) (CA INDEX NAME)

L4 ANSWER 8 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L4 ANSWER 9 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:195980 CAPLUS
DOCUMENT NUMBER: 144:274313
TITLE: Preparation of tetraaza-benzo[f]azulenes as vasopressin V1a antagonists
INVENTOR(S): Andrzej, Roman Batt; Baxter, Andrew John; Heeney, Celine; Stockley, Martin Lee; Bryan Roe, Michael; Hudson, Peter; Handy, Rachel
PATENT ASSIGNEE(S): Ferring B.V., Neth.
SOURCE: PCT Int. Appl., 463 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006021213	A2	20060302	WO 2005-DK540	20050824
WO 2006021213	A3	20060817		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
EP 1632494	A1	20060308	EP 2004-104062	20040824
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
AU 2005276790	A1	20060302	AU 2005-276790	20050824
CA 2567776	A1	20060302	CA 2005-2567776	20050824
EP 1781661	A2	20070509	EP 2005-773384	20050824
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, HR				
KR 2007032313	A	20070321	KR 2007-700447	20070108
IN 2007DN01047	A	20070803	IN 2007-DN1047	20070207

PRIORITY APPLN. INFO.: EP 2004-104062 A 20040824
US 2004-603557P P 20040824
WO 2005-DK540 W 20050824

OTHER SOURCE(S): MARPAT 144:274313
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. I [G = NR5R6, II-V; A1 = CH2, CH(OH), NH, N(alkyl), O and S; A2 = CH2, CH(OH), C(O), NH; A3, A12 = S, NH, N(alkyl), etc.; A4, A13 = CR9, N; A5, A14 = CR10, N; A6 = CH2, NH, N(alkyl), O; A7, A11 = C, N; A8, A9 = CH, N, NH, S, etc.; A10 = CH:CH, CH, N, NH, etc.; the ring

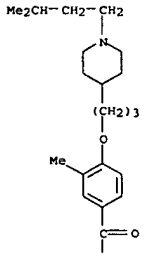
L4 ANSWER 9 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
constituted by A7-A11 is arom.; R1-R3 = H, alkyl, O(alkyl), NO2, F, Cl, Br; R4 = H, alkyl, aryl, heteroaryl, etc.; R5, R6 = alkyl, aryl, (CH2)f-aryl, (CH2)f-heteroaryl; R9, R10 = H, alkyl, alkoxy, etc.; W = O, NH; X = (CH2)m, C(O), SOj; Y = O, S, NH, N(alkyl); a, f, j = 1-2; m = 0-2;
with provisos] which are vasopressin V1a receptor antagonists, were prepd.
and formulated. E.g., a multi-step synthesis of 4-(3,3-dimethylbutyl)piperazine-1-carboxylic acid 4-(3,6-dimethyl-4,10-dihydro-3H-2,3,4,9-tetraaza-benzo[f]azulene-9-carbonyl)-2-fluorobenzylamide, starting
from 4-(tert-butoxycarbonylamino-methyl)-3-fluorobenzoic acid and 3,6-dimethyl-3,4,9,10-tetrahydro-2,3,4,9-tetraazabenzo[f]azulene (prepns. of the reactants was provided), was given. Compds. I were assayed to det.
their ability to inhibit the cellular consequences of AVP stimulation on intact cells. In the assay, compds. I cause significant inhibition of cellular activation at concns. of 30 μM or less. Preferred compds. I cause significant inhibition at concns. of 300 nM. Pharmaceutical compns.
of the compds. I are useful as treatment of dysmenorrhea.

IT 877847-97-7P 877849-19-9P 877857-73-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of tetraaza-benzo[f]azulenes as vasopressin V1a antagonists)

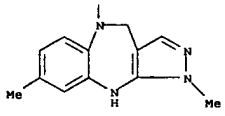
RN 877847-97-7 CAPLUS
CN Pyrazolo[3,4-b][1,5]benzodiazepine, 1,4,5,10-tetrahydro-1,8-dimethyl-5-[3-methyl-4-[3-[1-(3-methylbutyl)-4-piperidinyl]propoxy]benzoyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 9 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 1-A

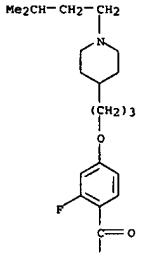


PAGE 2-A

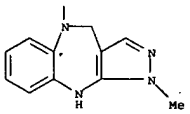


RN 877849-19-9 CAPLUS
CN Pyrazolo[3,4-b][1,5]benzodiazepine, 5-[2-fluoro-4-[3-[1-(3-methylbutyl)-4-piperidinyl]propoxy]benzoyl]-1,4,5,10-tetrahydro-1-methyl- (9CI) (CA INDEX NAME)

PAGE 1-A

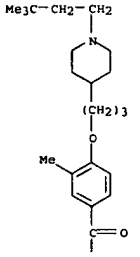


PAGE 2-A

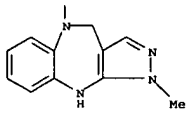


RN 877857-73-3 CAPLUS
CN Pyrazolo[3,4-b][1,5]benzodiazepine, 5-[4-[3-[1-(3,3-dimethylbutyl)-4-piperidinyl]propoxy]-3-methylbenzoyl]-1,4,5,10-tetrahydro-1-methyl- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

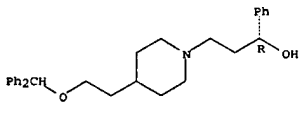


ACCESSION NUMBER: 2006:106015 CAPLUS
DOCUMENT NUMBER: 144:350506
TITLE: Design and Synthesis of Promiscuous High-Affinity Monoamine Transporter Ligands: Unraveling Transporter Selectivity
AUTHOR(S): Greiner, Elisabeth; Boos, Terrence L.; Prisinzano, Thomas E.; De Martino, Maria G.; Zeglis, Brian; Dersch, Christina M.; Marcus, Jamila; Partilla, John S.; Rothman, Richard B.; Jacobson, Arthur E.; Rice, Kenner C.
CORPORATE SOURCE: Laboratory of Medicinal Chemistry, National Institutes of Health, Bethesda, MD, 20892, USA
SOURCE: Journal of Medicinal Chemistry (2006), 49(5), 1766-1772
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:350506
AB A series of 4-[2-[bis(4-fluorophenyl)methoxy]ethyl]piperidines and 4-[2-[(bisphenyl)methoxy]ethyl]piperidines with different types of substituents in the phenylpropyl side-chain were synthesized and examined for their ability to bind to the dopamine transporter (DAT), the serotonin transporter (SERT), and the norepinephrine transporter (NET). All of the compds. showed high binding affinities for the DAT in the low to subnanomolar range. Their ability to bind to the SERT and the NET, while maintaining their high affinity for the DAT, could be altered by substitution in positions C-2 and C-3 of the phenylpropyl side-chain. This approach gave rise to a new set of compds. with selectivity for the DAT, the DAT and the SERT, or the DAT and the NET. Six compds. with relatively low SERT/DAT ratios were selected for addnl. study in biogenic amine uptake inhibition assays based on the biogenic amine transporter binding results. Some of the new ligands can serve as pharmacol. tools to block DAT or DAT and another transporter simultaneously.
IT 881647-61-6P 881647-63-8P 881647-65-0P
881647-67-2P 881647-69-4P 881647-71-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of diarylmethoxyethylpiperidinylpropanols as high-affinity monoamine transporter ligands)
RN 881647-61-6 CAPLUS
CN 1-Piperidinepropanol, 4-[2-(diphenylmethoxy)ethyl]-α-phenyl-, (αR)-, ethanedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 881647-60-5
CMF C29 H35 N O2

Absolute stereochemistry. Rotation (+).



CM 2

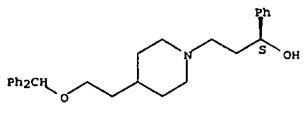
CRN 144-62-7
CMF C2 H2 O4

RN 881647-63-8 CAPLUS
CN 1-Piperidinepropanol, 4-[2-(diphenylmethoxy)ethyl]-α-phenyl-, (αS)-, ethanedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 881647-62-7
CMF C29 H35 N O2

Absolute stereochemistry. Rotation (-).



CM 2

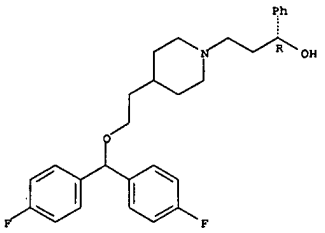
CRN 144-62-7
CMF C2 H2 O4

RN 881647-65-0 CAPLUS
CN 1-Piperidinepropanol, 4-[2-[bis(4-fluorophenyl)methoxy]ethyl]-α-phenyl-, (αR)-, ethanedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 881647-64-9
CMF C29 H33 F2 N O2

Absolute stereochemistry. Rotation (+).



CM 2

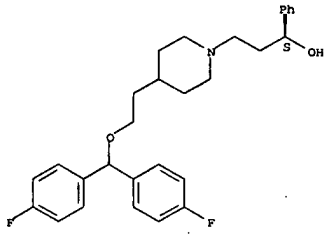
CRN 144-62-7
CMF C2 H2 O4

RN 881647-67-2 CAPLUS
CN 1-Piperidinepropanol, 4-[2-[bis(4-fluorophenyl)methoxy]ethyl]-α-phenyl-, (αS)-, ethanedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 881647-66-1
CMF C29 H33 F2 N O2

Absolute stereochemistry. Rotation (-).



CM 2

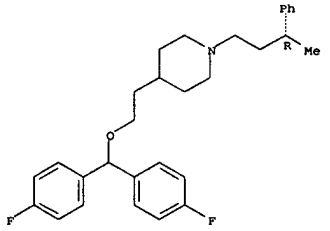
CRN 144-62-7
CMF C2 H2 O4

RN 881647-69-4 CAPLUS
CN Piperidine, 4-[2-[bis(4-fluorophenyl)methoxy]ethyl]-1-[(3R)-3-phenylbutyl]-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 881647-68-3
CMF C30 H35 F2 N O

Absolute stereochemistry. Rotation (-).



CM 2

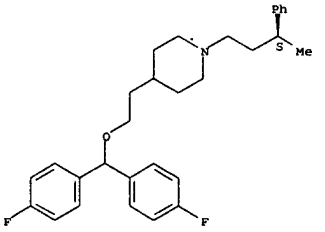
CRN 144-62-7
CMF C2 H2 O4

RN 881647-71-8 CAPLUS
CN Piperidine, 4-[2-[bis(4-fluorophenyl)methoxy]ethyl]-1-[(3S)-3-phenylbutyl]-, ethanedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 881647-70-7
CMF C30 H35 F2 N O

Absolute stereochemistry. Rotation (+).



CM 2

CRN 144-62-7
CMF C2 H2 O4

REFERENCE COUNT: 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

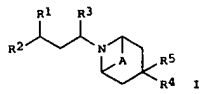
L4 ANSWER 11 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:11297 CAPLUS
DOCUMENT NUMBER: 144:108213
TITLE: Preparation of piperidine and 8-azabicyclo[3.2.1]octane derivatives as modulators of chemokine receptor CCR5
INVENTOR(S): Faull, Alan; Tucker, Howard
PATENT ASSIGNEE(S): Astrazeneca AB, Swed.
SOURCE: PCT Int. Appl., 122 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

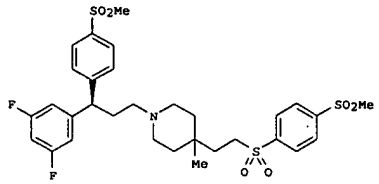
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006001752	A1	20060105	WO 2005-SE953	20050620
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2005257708	A1	20060105	AU 2005-257708	20050620
CA 2570893	A1	20060105	CA 2005-2570893	20050620
EP 1761491	A1	20070314	EP 2005-754141	20050620
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, HR, LV				
CN 101006057	A	20070725	CN 2005-80028432	20050620
US 2008021038	A1	20080124	US 2006-628808	20061207
IN 2007DN00246	A	20070803	IN 2007-DN246	20070109
PRIORITY APPLN. INFO.:			SE 2004-1656 A	20040624
			WO 2005-SE953 W	20050620

OTHER SOURCE(S): MARPAT 144:108213
GI

L4 ANSWER 11 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



I



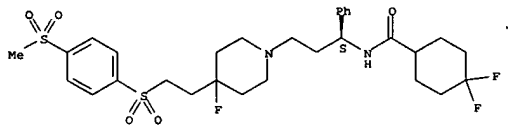
II

AB Title compds. represented by the formula I (wherein A = absent or CH2CH2; R1 = alkyl, amide, (hetero)aryl, etc.; R2 = (un)substituted Ph or heteroaryl; R3 = H or alkyl; R4 = halo, hydroxy, cyano, etc.; R5 = aryl, alkoxyaryl, alkylaryl, etc.; and pharmaceutically acceptable salts thereof) were prepared as chemokine receptor (CCR5) modulators. For example, II was provided in a multi-step synthesis starting from 4-methyl-4-[2-[[4-(methylsulfonyl)phenyl]sulfonyl]ethyl]piperidine. I were tested activity as CCR5 modulators for inhibiting the binding of RANTES and MIP-1α, certain compds. have an IC50 of less than 50 μM. Thus, I and their pharmaceutical compns. are useful for the treatment of CCR5-mediated diseases.

IT 872849-99-5P 872850-00-5P 872850-01-6P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of piperidine and 8-azabicyclo[3.2.1]octane derivs. as CCR5 modulators)

RN 872849-99-5 CAPLUS
CN Cyclohexanecarboxamide, 4,4-difluoro-N-[(1S)-3-[4-fluoro-4-[2-[[4-(methylsulfonyl)phenyl]sulfonyl]ethyl]-1-piperidinyl]-1-phenylpropyl]- (CA INDEX NAME)

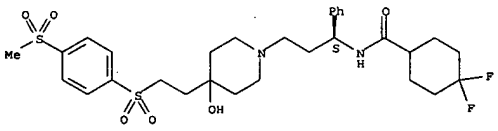
Absolute stereochemistry.



L4 ANSWER 11 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

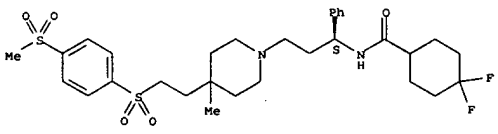
RN 872850-00-5 CAPLUS
CN Cyclohexanecarboxamide, 4,4-difluoro-N-[(1S)-3-[4-hydroxy-4-[2-[[4-(methylsulfonyl)phenyl]sulfonyl]ethyl]-1-piperidinyl]-1-phenylpropyl]- (CA INDEX NAME)

Absolute stereochemistry.



RN 872850-01-6 CAPLUS
CN Cyclohexanecarboxamide, 4,4-difluoro-N-[(1S)-3-[4-methyl-4-[2-[[4-(methylsulfonyl)phenyl]sulfonyl]ethyl]-1-piperidinyl]-1-phenylpropyl]- (CA INDEX NAME)

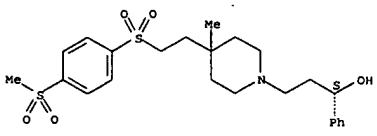
Absolute stereochemistry.



IT 872850-25-4P, (1S)-3-[4-Methyl-4-[2-[[4-(methylsulfonyl)phenyl]sulfonyl]ethyl]piperidin-1-yl]-1-phenylpropan-1-ol
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of piperidine and 8-azabicyclo[3.2.1]octane derivs. as CCR5 modulators)

RN 872850-25-4 CAPLUS
CN 1-Piperidinepropanol, 4-methyl-4-[2-[[4-(methylsulfonyl)phenyl]sulfonyl]ethyl]-α-phenyl-, (αS)- (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 11 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

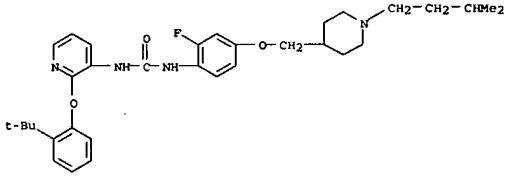
ACCESSION NUMBER: 2005:1262710 CAPLUS
DOCUMENT NUMBER: 144:22817
TITLE: Preparation of phenyl or pyridinyl ureas as antagonists of P2Y1 receptors for the treatment of thromboembolic disorders
INVENTOR(S): Chao, Hannguang J.; Tuerdi, Huji; Herpin, Timothy; Roberge, Jacques Yves; Liu, Yalei; Lawrence, R. Michael; Rehfuss, Robert P.; Clark, Charles G.; Qiao, Jennifer X.; Gungor, Timur; Lam, Patrick Y. S.; Wang, Tammy C.; Ruel, Rejean; L'Heureux, Alexandre L.; Thibeault, Carl; Bouthillier, Gilles; Schnur, Dora M.
PATENT ASSIGNEE(S): Bristol-Myers Squibb Company, USA
SOURCE: PCT Int. Appl., 343 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005113511	A1	20051201	WO 2005-US16422	20050511
WO 2005113511	A9	20060202		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2005261244	A1	20051124	US 2005-126567	20050510
AU 2005245389	A1	20051201	AU 2005-245389	20050511
US 2005267119	A1	20051201	US 2005-126915	20050511
EP 1751113	A1	20070214	EP 2005-747470	20050511
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, HR, LV, MK, YU				
CN 1984892	A	20070620	CN 2005-80023620	20050511
JP 2008500284	T	20080110	JP 2007-513296	20050511
IN 2006DN06431	A	20070831	IN 2006-DN6431	20061101
IN 2006DN06466	A	20070831	IN 2006-DN6466	20061102
MX 2006PA13022	A	20070123	MX 2006-PA13022	20061109
KR 2007032648	A	20070322	KR 2006-723622	20061110
NO 2006005534	A	20061205	NO 2006-5534	20061130

PRIORITY APPLN. INFO.:

US 2004-570288P	P	20040512
US 2005-665735P	P	20050328
US 2005-665817P	P	20050328
US 2005-126567	A	20050510
US 2005-126915	A	20050511
WO 2005-US16422	W	20050511

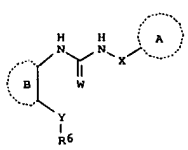
L4 ANSWER 12 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



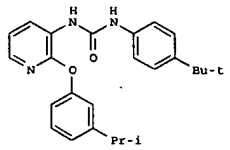
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L4 ANSWER 12 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
WO 2005-US16525 W 20050511

OTHER SOURCE(S): MARPAT 144:22817
GI



I



II

AB Title compds. I [wherein ring A = (un)substituted aryl or heterocyclyl; ring B = (un)substituted heteroaryl; W = O or S; X = bond or (un)substituted alkylene; Y = O, S, NH, etc.; R6 = Ph, phenylalkyl, etc., and stereoisomers, pharmaceutically acceptable salts or solvates thereof] were prepared as P2Y1 receptor inhibitors. For instance, etherification of m-isopropylphenol with 2-chloro-3-nitropyridine at 180°C for 700 s in a microwave (87% yield) followed by hydrogenation in the presence of Pd/C (90% yield) gave a pyridinamine, which underwent nucleophilic addition with p-tert-butylphenyl isocyanate to afford urea II (30% yield). Some compds. I have been identified to exhibit Ki's of ≤ 10 mM in the P2Y1 binding assay. I and their pharmaceutical comps. are useful in treating diseases responsive to modulation of P2Y1 receptor activity, such as thromboembolic disorders (no data).

IT 870546-68-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(inhibitor; preparation of Ph or pyridinyl ureas as antagonists of P2Y1 receptors for the treatment of thromboembolic disorders)

RN 870546-68-2 CAPLUS
CN Urea, N-[2-[2-(1,1-dimethylethyl)phenoxy]-3-pyridinyl]-N'-[2-fluoro-4-[[1-(3-methylbutyl)-4-piperidinyl]methoxy]phenyl]- (CA INDEX NAME)

L4 ANSWER 13 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1201083 CAPLUS
DOCUMENT NUMBER: 143:460319
TITLE: Scalable, regioselective synthesis of imidazole derivatives as histamine H3 receptor ligands
INVENTOR(S): Jones, Todd K.; Mani, Neelakandha
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 55 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

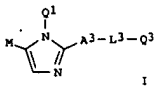
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005250948	A1	20051110	US 2005-123631	20050506
AU 2005243153	A1	20051124	AU 2005-243153	20050506
WO 2005110998	A1	20051124	WO 2005-US16041	20050506
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1747203	A1	20070131	EP 2005-746296	20050506
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU				
CN 1980896	A	20070613	CN 2005-80022596	20050506
JP 2007536270	T	20071213	JP 2007-511673	20050506
IN 2006KN03198	A	20070608	IN 2006-KN3198	20061102

PRIORITY APPLN. INFO.:

US 2004-569405P	P	20040507
WO 2005-US16041	W	20050506

OTHER SOURCE(S): CASREACT 143:460319; MARPAT 143:460319
GI

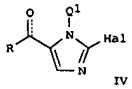
L4 ANSWER 13 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



I

II

III

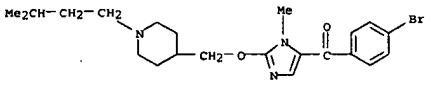


IV

AB Imidazoles I [Q1 = (un)substituted C1-7-alkyl, C2-7-alkenyl, Lnk1-C(RR1)(AR)-Lnk2-N+(QS1)(QS2)(QS3); Lnk1 = bond, (un)substituted C2-4-alkylene; RR1 = H, (un)substituted C1-6-alkyl; AR = (un)substituted Ph, naphthyl, CH2Ph, thienyl, benzo[b]thienyl, indolyl; Lnk2 = bond, (un)substituted C2-4-alkylene; QS1, QS2, QS3 = H, (un)substituted C1-6-alkyl; N+(QS1)(QS2), N+(QS1)(QS3), N+(QS2)(QS3) = heterocycle; N+(QS1)(QS2)(QS3) = quinuclidinium-QNCS; QNCS = H, (un)substituted C1-6-alkyl, Ph, naphthyl, CH2Ph, thienyl, C3-7-cycloalkyl; M = H, CH2RM, CHOHRM, C(:O)RM, C(:NOH)RM; RM = H, OH, C1-7-alkyl, cycloalkyl, aryl, biaryl, heterocyclyl, etc.; A3 = NH, NR3, S, SO, SO2, O; R3 = C1-6-alkyl; L3 = C1-7-alkyl, C2-7-alkenyl, bond; Q3 = C1-7-alkyl, C2-7-alkenyl, C3-7-cycloalkyl, C5-7-cycloalkenyl, aryl, 4- to 7-membered heterocyclyl, etc.; A3L3Q3 = CO-Lnk3-ACS; Lnk3 = bond, (un)substituted C2-4-alkylene; ACS = H, (un)substituted C1-6-alkyl], their pharmaceutically acceptable salts, esters, ethers, N-oxides, amides, hydrates, solvates or isotopically labeled derivs., compns. containing them, methods of preparing them, including regioselective scale-up synthetic methods, and methods of using them are described. The procedure for their preparation comprises: (i) regioselective halogenation of imidazole II with a perhaloalkane or N-F electrophilic fluorinating agent; (ii) regioselective reaction of haloimidazole III (Hal = halogen) with a base and then an electrophile; (iii) reaction of haloimidazole IV [R = RM, OH; dashed line = single or double bond] with a deprotonated oxygen or sulfur nucleophile, HA3L3Q3, to give I. Thus, I [M = COC6H4Cl-4, Q1 = Me, A3 = S, L3 = CH2CH2, Q3 = NMe2] was prepared from 2-mercaptoimidazole via reaction with 4-ClC6H4CHO in THF containing Me3CLi, S-alkylation with ClCH2CH2NMe2 in MeCOMe containing K2CO3, and oxidation with MnO2 in CH2Cl2. The histamine H3 receptor ligand binding activity of I was determined [Ki = 98 nM].

IT 465616-31-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(scalable, regioselective synthesis of imidazole derivs. as histamine H3 receptor ligands)

L4 ANSWER 13 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
RN 465616-31-3 CAPLUS
CN Methanone, (4-bromophenyl)[1-methyl-2-[[1-(3-methylbutyl)-4-piperidinyl]methoxy]-1H-imidazol-5-yl]- (CA INDEX NAME)



L4 ANSWER 14 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:99157 CAPLUS
DOCUMENT NUMBER: 142:170033
TITLE: Methods and compositions for the treatment or prevention of human immunodeficiency virus and related conditions using cyclooxygenase-2 selective inhibitors and antiviral agents
INVENTOR(S): Maziasz, Timothy
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 172 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2005026902	A1	20050203	US 2004-769485		20040130
PRIORITY APPLN. INFO.:			US 2003-443910P	P	20030131

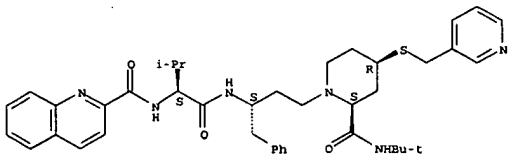
OTHER SOURCE(S): MARPAT 142:170033

AB The present invention provides compns. and methods for the treatment of human immunodeficiency virus (HIV) infection as well as HIV associated diseases and related disorders. More particularly, the invention provides a combination therapy for the treatment of HIV infection as well as HIV associated diseases and related disorders comprising the administration to a subject of an anti-human immunodeficiency virus agent in combination with a cyclooxygenase-2 selective inhibitor or an isomer or a pharmaceutically acceptable salt, ester, or prodrug thereof.

IT 834911-99-8 834912-00-4
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(methods and compns. for treatment or prevention of HIV infection and related conditions using cyclooxygenase-2 selective inhibitors and antiviral agents)

RN 834911-99-8 CAPLUS
CN 2-Quinolinecarboxamide, N-[(1S)-1-[[[(1S)-3-[(2S,4R)-2-[[(1,1-dimethylethyl)amino]carbonyl]-4-[(3-pyridinylmethyl)thio]-1-piperidinyl]-1-(phenylmethyl)propyl]amino]carbonyl]-2-methylpropyl]- (CA INDEX NAME)

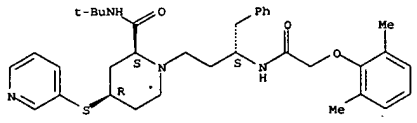
Absolute stereochemistry.



RN 834912-00-4 CAPLUS

L4 ANSWER 14 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
CN 2-Piperidinecarboxamide, N-(1,1-dimethylethyl)-1-[(3S)-3-[[(2,6-dimethylphenoxy)acetyl]amino]-4-phenylbutyl]-4-(3-pyridinylthio)-, (2S,4R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L4 ANSWER 15 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

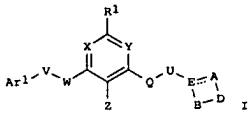
ACCESSION NUMBER: 2005:74115 CAPLUS
DOCUMENT NUMBER: 142:176858
TITLE: Preparation of trisubstituted aryl and heteroaryl derivatives, in particular pyrimidines, as modulators of G-coupled protein receptor and their use in the prophylaxis or treatment of metabolic disorders
INVENTOR(S): Jones, Robert M.; Semple, Graeme; Xiong, Yifeng; Shin, Young-Jun; Ren, Albert S.; Calderon, Imelda; Choi, Jin Sun Karoline; Fioravanti, Beatriz; Lehmann, Juerg; Bruce, Marc A.
PATENT ASSIGNEE(S): Arena Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 277 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005007647	A1	20050127	WO 2004-US22327	20040709
WO 2005007647	A9	20050407		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004257261	A1	20050127	AU 2004-257261	20040709
CA 2532152	A1	20050127	CA 2004-2532152	20040709
US 2005070562	A1	20050331	US 2004-888747	20040709
EP 1644357	A1	20060412	EP 2004-778037	20040709
EP 1644357	B1	20071212		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
CN 1823056	A	20060823	CN 2004-80019950	20040709
BR 2004012488	A	20060919	BR 2004-12488	20040709
JP 2007528856	T	20071018	JP 2006-518970	20040709
AT 380809	T	20071215	AT 2004-778037	20040709
MX 2006PA00444	A	20060823	MX 2006-PA444	20060111
IN 2006KN00094	A	20070323	IN 2006-KN94	20060112
NO 2006000636	A	20060331	NO 2006-636	20060209
US 2007155763	A1	20070705	US 2006-602775	20061121
PRIORITY APPLN. INFO.:			US 2003-486728P	P 20030711
			US 2003-487370P	P 20030714
			US 2004-888747	A1 20040709
			WO 2004-US22327	W 20040709

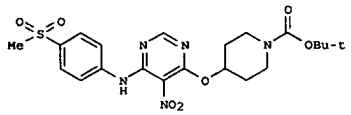
OTHER SOURCE(S): CASREACT 142:176858; MARPAT 142:176858

L4 ANSWER 15 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

GI



I



II

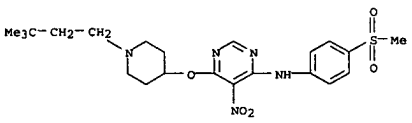
AB Title compds. I [wherein A, B = independently (un)substituted alkylene; D = O, S, SO, SO2, etc.; E = N, C, CH and derivs.; V = (un)substituted hetero/alkylene, ethynylene; U = (un)substituted cyclo/alkylene; W = absent, NH and derivs., O, S, SO; Q = NH and derivs., O, S, SO, SO2; X, Y = independently N, CH and derivs.; Z = acyl, CN, CO2H, NH2, CONH2, halo, NO2, aryl, etc.; Ar1 = (un)substituted hetero/aryl; R1 = H, alkenyl, OH, acyloxy, etc.; their pharmaceutically acceptable salts, hydrates and solvates] were prepared as modulators, in particular agonists and inverse agonists of G-coupled protein receptor (RUP3), for treating diabetes, hyperglycemia and other metabolic disorders. Ten biol. examples are given. Thus, reacting 4-hydroxypiperidine-1-carboxylic acid tert-Bu ester with (6-chloro-5-nitropyrimidin-4-yl)(4-methylsulfonylphenyl)amine in the presence of NaH/THF gave II in 68% yield. Selected I displayed EC50 < 300 nM in a melanophore-based pigment dispersion assay. Selected RUP3 agonists I lowered blood glucose levels in rats in an oral glucose tolerance test. Thus, I are useful in the prophylaxis or treatment of metabolic disorders and complications thereof, such as, diabetes and obesity.

IT 832751-54-9P, [6-[[1-(3,3-Dimethylbutyl)piperidin-4-yloxy]-5-nitropyrimidin-4-yl](4-methylsulfonylphenyl)amine 832751-56-1P, (4-Methylsulfonylphenyl)[6-[[1-(3-methylbutyl)piperidin-4-yl]oxy]-5-nitropyrimidin-4-yl]amine 832755-68-7P, 4-(2-Fluoro-4-methylsulfonylphenoxy)-5-methyl-6-[[1-(3-methylbutyl)piperidin-4-yl]oxy]pyrimidine
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of trisubstituted aryl and heteroaryl derivs.,

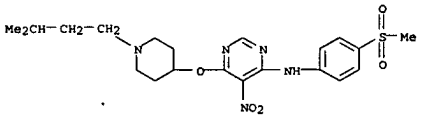
L4 ANSWER 15 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

in particular pyrimidines, as modulators of G-coupled protein receptor and their use in the treatment of diabetes, hyperglycemia and related diseases)

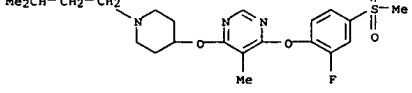
RN 832751-54-9 CAPLUS
CN 4-Pyrimidinamine, 6-[[1-(3,3-dimethylbutyl)-4-piperidinyl]oxy]-N-[4-(methylsulfonyl)phenyl]-5-nitro- (CA INDEX NAME)



RN 832751-56-1 CAPLUS
CN 4-Pyrimidinamine, 6-[[1-(3-methylbutyl)-4-piperidinyl]oxy]-N-[4-(methylsulfonyl)phenyl]-5-nitro- (CA INDEX NAME)



RN 832755-68-7 CAPLUS
CN Pyrimidine, 4-[2-fluoro-4-(methylsulfonyl)phenoxy]-5-methyl-6-[[1-(3-methylbutyl)-4-piperidinyl]oxy]- (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

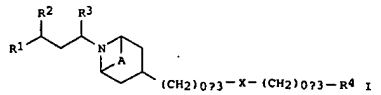
L4 ANSWER 16 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:546479 CAPLUS
DOCUMENT NUMBER: 141:106374
TITLE: A preparation of novel piperidine derivatives as modulators of chemokine receptor CCR5
INVENTOR(S): Cumming, John; Faull, Alan; Fielding, Colin; Oldfield, John; Tucker, Howard
PATENT ASSIGNEE(S): Astrazeneca AB, Swed.
SOURCE: PCT Int. Appl., 118 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

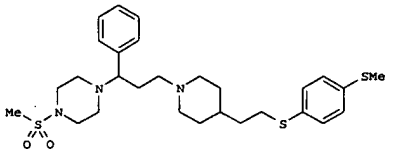
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004056773	A1	20040708	WO 2003-SE2008	20031218
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2508624	A1	20040708	CA 2003-2508624	20031218
AU 2003288856	A1	20040714	AU 2003-288856	20031218
EP 1572650	A1	20050914	EP 2003-781235	20031218
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003017459	A	20051116	BR 2003-17459	20031218
CN 1732153	A	20060208	CN 2003-80107833	20031218
JP 2006514107	T	20060427	JP 2005-502630	20031218
IN 2005DN02442	A	20070406	IN 2005-DN2442	20050607
MX 2005PA06381	A	20050829	MX 2005-PA6381	20050614
US 2006189650	A1	20060824	US 2005-539859	20050617
NO 2005003539	A	20050920	NO 2005-3539	20050719
ZA 2005004616	A	20060329	ZA 2005-4616	20060116
PRIORITY APPLN. INFO.:			SE 2002-3821	A 20021220
			SE 2003-499	A 20030224
			SE 2003-1425	A 20030515
			WO 2003-SE2008	W 20031218

OTHER SOURCE(S): MARPAT 141:106374

GI



I



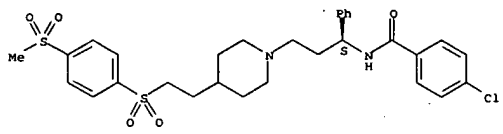
II

AB The invention relates to a preparation of novel piperidine derivs. of formula I
[wherein: A is absent or (CH2)2; R1 is alkyl, C(O)NH-alkyl, or CO2-alkyl, etc.; R2 is alkyl, Ph, heteroaryl, or cycloalkyl; R3 is H or alkyl; R4 is (hetero)aryl or (cyclo)alkyl; X is O or S(O)0-2], useful as modulators of chemokine receptor CCR5. The invention compds. are claimed to be useful for the treatment of CCR5-mediated diseases such as autoimmune, inflammatory, or proliferative diseases. The invented compds. are also of
value in inhibiting the entry of viruses (such as HIV) into target cells (no biol. data). The ability of the invention compds. to inhibit the binding of RANTES and MIP-1α was assessed (certain compds. of formula I have IC50 < 50 μM). For instance, Pic50 (neg. log of the IC50 result) for piperidine derivative II was determined as 6.91 (table XV).

IT 718610-18-5P 718611-68-8P 718611-69-9P
718611-70-2P 718611-71-3P 718611-72-4P
718611-73-5P 718612-04-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of novel piperidine derivs. as modulators of chemokine receptor
ccr5)

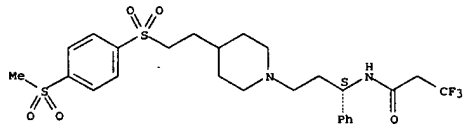
RN 718610-18-5 CAPLUS
CN Benzamide, 4-chloro-N-[(1S)-3-[4-[2-[[4-(methylsulfonyl)phenyl]sulfonyl]ethyl]-1-piperidinyl]-1-phenylpropyl]- (CA INDEX NAME)

Absolute stereochemistry.



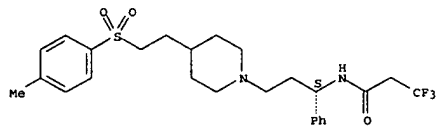
RN 718611-68-8 CAPLUS
CN Propanamide, 3,3,3-trifluoro-N-[(1S)-3-[4-[2-[[4-(methylsulfonyl)phenyl]sulfonyl]ethyl]-1-piperidinyl]-1-phenylpropyl]- (CA INDEX NAME)

Absolute stereochemistry.



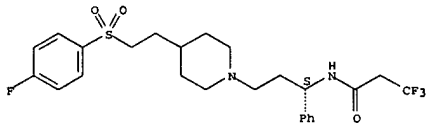
RN 718611-69-9 CAPLUS
CN Propanamide, 3,3,3-trifluoro-N-[(1S)-3-[4-[2-[(4-methylphenyl)sulfonyl]ethyl]-1-piperidinyl]-1-phenylpropyl]- (CA INDEX NAME)

Absolute stereochemistry.



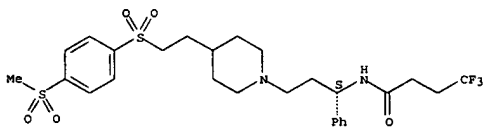
RN 718611-70-2 CAPLUS
CN Propanamide, 3,3,3-trifluoro-N-[(1S)-3-[4-[2-[(4-fluorophenyl)sulfonyl]ethyl]-1-piperidinyl]-1-phenylpropyl]- (CA INDEX NAME)

Absolute stereochemistry.



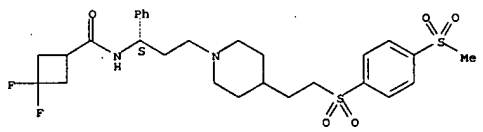
RN 718611-71-3 CAPLUS
CN Butanamide, 4,4,4-trifluoro-N-[(1S)-3-[4-[2-[[4-(methylsulfonyl)phenyl]sulfonyl]ethyl]-1-piperidinyl]-1-phenylpropyl]- (CA INDEX NAME)

Absolute stereochemistry.



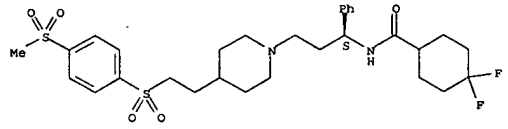
RN 718611-72-4 CAPLUS
CN Cyclobutanecarboxamide, 3,3-difluoro-N-[(1S)-3-[4-[2-[[4-(methylsulfonyl)phenyl]sulfonyl]ethyl]-1-piperidinyl]-1-phenylpropyl]- (CA INDEX NAME)

Absolute stereochemistry.



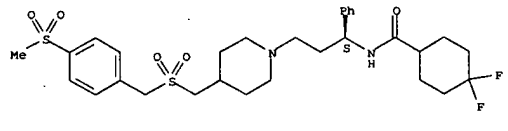
RN 718611-73-5 CAPLUS
CN Cyclohexanecarboxamide, 4,4-difluoro-N-[(1S)-3-[4-[2-[[4-(methylsulfonyl)phenyl]sulfonyl]ethyl]-1-piperidinyl]-1-phenylpropyl]- (CA INDEX NAME)

Absolute stereochemistry.



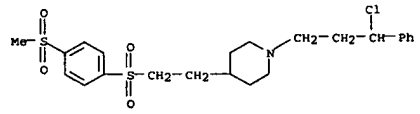
RN 718612-04-5 CAPLUS
CN Cyclohexanecarboxamide, 4,4-difluoro-N-[(1S)-3-[4-[[[4-(methylsulfonyl)phenyl]methyl]sulfonyl]methyl]-1-piperidinyl]-1-phenylpropyl]- (CA INDEX NAME)

Absolute stereochemistry.



IT 718610-15-2P 718610-19-6P 718610-23-2P
718610-66-3P 718610-69-6P 718611-16-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of novel piperidine derivs. as modulators of chemokine receptor
ccr5)

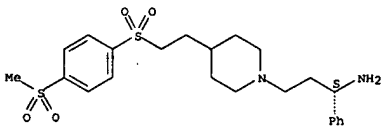
RN 718610-15-2 CAPLUS
CN Piperidine, 1-(3-chloro-3-phenylpropyl)-4-[2-[[4-(methylsulfonyl)phenyl]sulfonyl]ethyl]- (CA INDEX NAME)



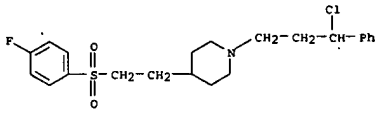
RN 718610-19-6 CAPLUS
CN 1-Piperidinepropanamine, 4-[2-[[4-(methylsulfonyl)phenyl]sulfonyl]ethyl]-α-phenyl-, (αS)- (CA INDEX NAME)

Absolute stereochemistry.

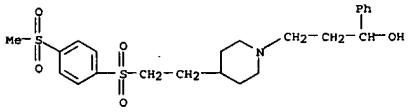
L4 ANSWER 16 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 718610-23-2 CAPLUS
CN Piperidine, 1-(3-chloro-3-phenylpropyl)-4-[2-[(4-fluorophenyl)sulfonyl]ethyl]- (CA INDEX NAME)

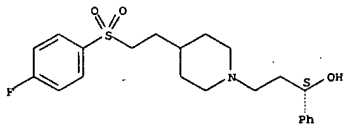


RN 718610-66-3 CAPLUS
CN 1-Piperidinepropanol, 4-[2-[[4-(methylsulfonyl)phenyl]sulfonyl]ethyl]-α-phenyl- (CA INDEX NAME)



RN 718610-69-6 CAPLUS
CN 1-Piperidinepropanol, 4-[2-[(4-fluorophenyl)sulfonyl]ethyl]-α-phenyl-, (αS)- (CA INDEX NAME)

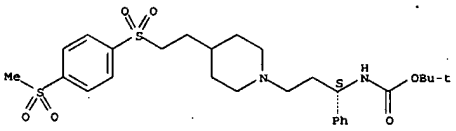
Absolute stereochemistry.



RN 718611-16-6 CAPLUS

L4 ANSWER 16 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
CN Carbamic acid, [(1S)-3-[4-[2-[[4-(methylsulfonyl)phenyl]sulfonyl]ethyl]-1-piperidinyl]-1-phenylpropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



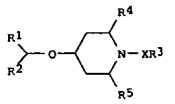
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 17 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER:	2004:139114 CAPLUS
DOCUMENT NUMBER:	140:193053
TITLE:	Hematopoiesis-type prostaglandin D2 synthase inhibitors as antiallergics
INVENTOR(S):	Muto, Susumu; Itai, Akiko; Inoue, Takeshi; Urade, Yoshihiro
PATENT ASSIGNEE(S):	Iyaku Bunshi Sekkei Kenkyusho K. K., Japan; Osaka Bio Science Research Institute
SOURCE:	Jpn. Kokai Tokkyo Koho, 61 pp. CODEN: JKXXAF
DOCUMENT TYPE:	Patent
LANGUAGE:	Japanese
FAMILY ACC. NUM. COUNT:	1
PATENT INFORMATION:	

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004051600	A	20040219	JP 2002-214788	20020724
PRIORITY APPLN. INFO.:			JP 2002-214788	20020724

OTHER SOURCE(S): MARPAT 140:193053
GI



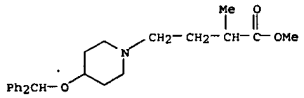
I

AB The hematopoiesis-type prostaglandin D2 synthase inhibitors (I; X = single bond, alkylene, alkenylene, alkylene-amino base, alkylene-amino-alkylene; R1 = aryl; R2 = H, alkyl, aryl; R3 = acyl, cyclic ring; R4, R5 = H, alkylene) are claimed as antiallergics, antiasthmatics, analgesics, neuroprotectants, and regulators for sex cycle, sleep, olfactory function, and body temperature I were prepared, and their inhibitory effects on prostaglandin D2 synthase and brain traumatic injury were tested.

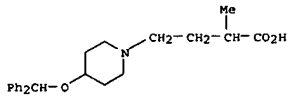
IT 661481-80-7P 661481-81-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(hematopoiesis-type prostaglandin D2 synthase inhibitors as antiallergics)

RN 661481-80-7 CAPLUS
CN 1-Piperidinebutanoic acid, 4-(diphenylmethoxy)-α-methyl-, methyl ester (CA INDEX NAME)

L4 ANSWER 17 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 661481-81-8 CAPLUS
CN 1-Piperidinebutanoic acid, 4-(diphenylmethoxy)-α-methyl-, sodium salt (9CI) (CA INDEX NAME)



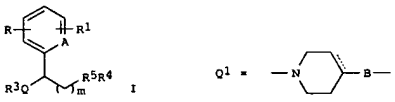
● Na

L4 ANSWER 18 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:1006953 CAPLUS
DOCUMENT NUMBER: 140:59523
TITLE: Preparation of phenylalkylamines and pyridylalkylamines as 5-HT1A serotonergic ligands.
INVENTOR(S): Leonardi, Amedeo; Motta, Gianni; Riva, Carlo; Guarneri, Luciano
PATENT ASSIGNEE(S): Recordati S.A., Switz.; Recordati Industria Chimica e Farmaceutica S.p.A.
SOURCE: PCT Int. Appl., 44 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003106421	A2	20031224	WO 2003-EP6290	20030616
WO 2003106421	A3	20040617		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
IT 2002MI1329	A1	20031215	IT 2002-MI1329	20020614
AU 2003276982	A1	20031231	AU 2003-276982	20030616
US 2004058962	A1	20040325	US 2003-463221	20030616
PRIORITY APPLN. INFO.:			IT 2002-MI1329 A	20020614
			US 2002-389002P P	20020614
			WO 2003-EP6290 W	20030616

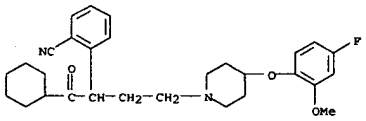
OTHER SOURCE(S): MARPAT 140:59523
GI



AB Title compds. [I; R = H, halo, alkyl, alkoxy, alkylthio, OH, halo, alkenyl, alkynyl, alkylcarbonyl, alkylsulfinyl, alkylsulfonyl, dialkylaminosulfonyl, etc.; R1 = H, (substituted) cycloalkyl, aryl, aryloxy, aralkyl, aralkoxy, heterocyclyl, heterocycloalkyl, heterocycycloxy, heterocycloalkoxy; Q = CO, CH(OH), CH(OR2); R2 = (substituted) alkyl, alkenyl, alkynyl, cycloalkyl; R3 = (substituted) alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heterocyclyl; R4 = (substituted) aryl, heterocyclyl; A = CH, N; R5 = NR6(CH2)nR7, Q1; m, n = 2, 3; R6 = H, alkyl; R7 = O, S, NR6, CH2; B = bond, O, S, NR6, CH2; dotted line = optional double bond; with provisos], were prepd. for treatment of neuromuscular dysfunction of the lower urinary tract (no data). Thus, 3-(2-cyanophenyl)-4-cyclohexyl-4-oxobutyraldehyde (prepn. given), 8-(N-methyl-2-aminoethoxy)quinoline, and Na(AcO)3BH were stirred with AcOH in CH2Cl2 for 1 h to give 52% 8-[N-[3-(2-cyanophenyl)-4-cyclohexyl-4-oxobutyl]-N-methyl-2-aminoethoxy]quinoline.

IT 637036-69-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of phenylalkylamines and pyridylalkylamines as 5-HT1A serotonergic ligands)

RN 637036-69-2 CAPLUS
CN Benzonitrile, 2-[1-(cyclohexylcarbonyl)-3-[4-(4-fluoro-2-methoxyphenoxy)-1-piperidinyl]propyl]- (CA INDEX NAME)



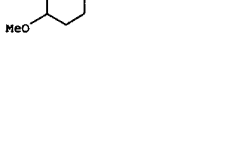
L4 ANSWER 19 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:972644 CAPLUS
DOCUMENT NUMBER: 140:326304
TITLE: Comparison on mutagenic matters arising respectively from source water of Donghu Lake and water supply
AUTHOR(S): Tang, Fei; Zhang, Shuibing; Wang, Yazhou; Gu, Kangding; Liang, Gaodao; Zhu, Qiming
CORPORATE SOURCE: Tongji Medical College, Huazhong University of Science and Technology, Wuhan, Hubei Province, 430030, Peop. Rep. China
SOURCE: Zhongguo Jishui Paishui (2002), 18(7), 5-7
CODEN: ZGPAFP; ISSN: 1000-4602
PUBLISHER: Zhongguo Jishui Paishui Zazhishe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB Based on the Ames test in combination with gas chromatog./mass spectroscopy (GC/MS) anal., examination was made for the mutagenicity and chemical composition of nonvolatile organic compds. (NOCs) in source water from Donghu Lake and water supply. The results showed that whether the exotic metabolic activity system (S9) is added, the NOCs from water supply exhibit obvious mutagenicity to the bacterial strain TA98 and TA100 and the mutagenicity of NOCs from source water cannot be detected. By using GC/MS anal., more than 20 chemical comps. of NOCs including phthalic ester are identified both in source water and water supply.

IT 677731-37-2
RL: ADV (Adverse effect, including toxicity); POL (Pollutant); BIOL (Biological study); OCCU (Occurrence)
(mutagenicity of water of Donghu Lake, China)

RN 677731-37-2 CAPLUS
CN Acetamide, N-[3-(4-methoxy-1-piperidinyl)-1-methylpropyl]-N-methyl- (CA INDEX NAME)



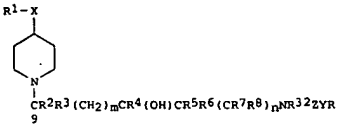
L4 ANSWER 20 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:656742 CAPLUS
DOCUMENT NUMBER: 139:197375
TITLE: Preparation of piperidinyl alcohols as chemokine receptor modulators for treatment of diseases such as asthma
INVENTOR(S): Alcaraz, Lilian; Furber, Mark; Purdie, Mark; Springthorpe, Brian
PATENT ASSIGNEE(S): Astrazeneca A.B., Swed.
SOURCE: PCT Int. Appl., 166 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003068743	A1	20030821	WO 2003-SE258	20030217
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2472822	A1	20030821	CA 2003-2472822	20030217
AU 2003206554	A1	20030904	AU 2003-206554	20030217
BR 2003007477	A	20041109	BR 2003-7477	20030217
EP 1478624	A1	20041124	EP 2003-705600	20030217
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1633414	A	20050629	CN 2003-804130	20030217
JP 2005525341	T	20050825	JP 2003-567874	20030217
NZ 534296	A	20060127	NZ 2003-534296	20030217
NZ 541682	A	20060526	NZ 2003-541682	20030217
CN 1907968	A	20070207	CN 2006-10110091	20030217
IN 2004DN02041	A	20050401	IN 2004-DN2041	20040715
MX 2004PA07906	A	20041015	MX 2004-PA7906	20040813
ZA 2004006509	A	20050915	ZA 2004-6509	20040816
US 2005107428	A1	20050519	US 2004-504936	20040817
NO 2004003899	A	20041117	NO 2004-3899	20040917
PRIORITY APPLN. INFO.:			SE 2002-465 A	20020218
			SE 2002-2673 A	20020909
			CN 2003-804130 A3	20030217
			NZ 2003-534296 A1	20030217
			WO 2003-SE258 W	20030217

OTHER SOURCE(S): CASREACT 139:197375; MARPAT 139:197375
GI

L4 ANSWER 20 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



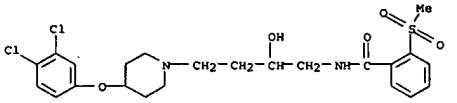
AB The invention provides piperidinyl alcs. (shown as I; variables defined below; e.g. N-[(2R)-3-[4-(3,4-dichlorophenoxy)piperidin-1-yl]-2-hydroxypropyl]-2-(methylsulfonyl)benzamide) for use as modulators of chemokine receptor (especially CCR3) activity for use in, for example, treating asthma. For I: X is CH2, O, S(O)2 or NR10; Y is a bond, CH2, NR35, CH2NH, CH2NHC(O), CH(OH), CH(NHCOR33), CH(NHSO2R34), CH2O or CH2S; Z is C(O), or when Y is a bond Z can also be S(O)2; R1 is (un)substituted aryl, (un)substituted heterocyclyl or C4-6 cycloalkyl fused to a benzene ring; addnl. details are given in the claims. Percent inhibition at 3 nM eotaxin of eotaxin-mediated human eosinophil chemotaxis is tabulated for 16 examples of I, e.g. 106 % for N-[(2R)-3-[4-(3,4-dichlorophenoxy)piperidin-1-yl]-2-hydroxypropyl]-1-oxo-1,2-dihydroisoquinoline-4-carboxamide. Histamine H1 receptor binding activity was determined for the same compds., e.g. pKi = 8.4 for N-[(2R)-3-[4-(3,4-dichlorophenoxy)piperidin-1-yl]-2-hydroxypropyl]-1-oxo-1,2-dihydroisoquinoline-4-carboxamide. 49 Example prepns. of intermediates and 234 of I are included. For example, to prepare N-[(2R)-3-[4-(3,4-Dichlorophenoxy)piperidin-1-yl]-2-hydroxypropyl]-2-(methylsulfonyl)benzamide (0.055 g), a mixture of 2-(methylsulfonyl)benzoic acid (0.063 g), (2R)-1-amino-3-[4-(3,4-dichlorophenoxy)piperidin-1-yl]propan-2-ol (0.1 g) and N,N-diisopropylethylamine (0.1 mL) in dry DMF (3 mL) was cooled to 0° with stirring; 2-(1H-9-azabenzotriazol-1-yl)-1,1,3,3-tetramethyluronium hexafluorophosphate (0.13 g) was added and the mixture was stirred at 0° for 1-2 h. The invention also provides a process for making 4-(3,4-dichlorophenoxy)piperidine, which is useful as an intermediate for making certain compds. of the invention. The process comprises (a) reacting 4-hydroxypiperidine with a suitable base in a suitable solvent at room temperature; and (b) heating the mixture so produced and 1,2-dichloro-4-fluorobenzene at 50-90°, or at reflux of the solvent used.

IT 583881-28-1P, N-[4-[4-(3,4-Dichlorophenoxy)piperidin-1-yl]-2-hydroxybutyl]-2-(methylsulfonyl)benzamide
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of piperidinyl alcs. as chemokine receptor modulators for treatment of diseases such as asthma)

RN 583881-28-1 CAPLUS

CN Benzamide, N-[4-[4-(3,4-dichlorophenoxy)-1-piperidinyl]-2-hydroxybutyl]-2-

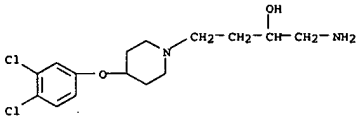
L4 ANSWER 20 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
(methylsulfonyl)- (CA INDEX NAME)



IT 583880-37-9P, 1-Amino-4-[4-(3,4-dichlorophenoxy)piperidin-1-yl]butan-2-ol
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of piperidinyl alcs. as chemokine receptor modulators for treatment of diseases such as asthma)

RN 583880-37-9 CAPLUS

CN 1-Piperidinepropanol, α-(aminomethyl)-4-(3,4-dichlorophenoxy)- (CA INDEX NAME)



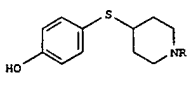
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 21 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:591168 CAPLUS
DOCUMENT NUMBER: 139:149532
TITLE: Preparation of thio-bridged aryl substituted azacyclic derivatives for use in pharmaceutical compositions as modulators of acetylcholine receptors
INVENTOR(S): Astles, Peter Charles; Baker, Stephen Richard; Bonnefous, Celine; Vernier, Jean Michel; Keenan, Martine; Sanderson, Adam Jan
PATENT ASSIGNEE(S): Eli Lilly and Company, USA
SOURCE: PCT Int. Appl., 117 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003062224	A1	20030731	WO 2002-US21297	20020729
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1467986	A1	20041020	EP 2002-756389	20020729
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
US 2005070520	A1	20050331	US 2004-500517	20040629
PRIORITY APPLN. INFO.:			US 2002-350150P	P 20020117
			WO 2002-US21297	W 20020729

OTHER SOURCE(S): MARPAT 139:149532
GI



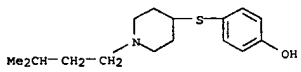
AB Arylthio substituted azacyclic compds., such as A-S-B [A = azacyclic, such as 4-piperidinyl, 3-pyrrolidinyl, or 4-azepanyl; B = aryl, heteroaryl], were prepared for therapeutic uses that require modulation of neurotransmission by promoting the release of neurotransmitters such as acetylcholine, dopamine and norepinephrine and are useful for the treatment of disorders of the central and autonomic nervous systems. More particularly, the present invention relates to thio-bridged aryl compds. that are capable of modulating acetylcholine receptors and pharmaceutical

L4 ANSWER 21 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
compns. comprising such compds. Thus, the trifluoroacetate salt of 4-(4-hydroxyphenylthio)piperidine I (R = H) was prepd. via a substitution reaction of 1-(tert-butoxycarbonyl)-4-methanesulfonyloxypiperidine with 4-mercaptophenol using NaH in THF and DMF and subsequent deprotection/salt formation of the N-BOC protected intermediate using TFA. I (R = cyclopropanylmethyl) was then prepd. by reacting cyclopropanecarboxaldehyde with I.TFA (R = H) using MP-carbonate resin and 1% AcOH/DMF followed by treatment with triacetoxyborohydride and 1% AcOH/DMF. Effects of the prepd. azacyclics on nicotine receptor β4 subtypes were detd. using a functional Ca-flux assay.

IT 569660-26-0P 569660-38-4P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of thio-bridged aryl substituted azacyclic derivs. for use in pharmaceutical compns. as modulators of acetylcholine receptors)

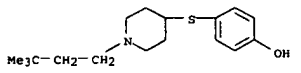
RN 569660-26-0 CAPLUS

CN Phenol, 4-[[1-(3-methylbutyl)-4-piperidinyl]thio]- (CA INDEX NAME)



RN 569660-38-4 CAPLUS

CN Phenol, 4-[[1-(3,3-dimethylbutyl)-4-piperidinyl]thio]-, (CA INDEX NAME)



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 22 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2003:434534 CAPLUS
DOCUMENT NUMBER: 139:22111
TITLE: Preparation of piperidine-based MCH antagonists for treatment of obesity and CNS disorders
INVENTOR(S): Burnett, Duane A.; Wu, Wen-Lian
PATENT ASSIGNEE(S): Schering Corporation, USA
SOURCE: PCT Int. Appl., 79 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003045918	A1	20030605	WO 2002-US37956	20021125
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SC, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UZ, VC, VN, YU, ZA, ZM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2467857	A1	20030605	CA 2002-2467857	20021125
AU 2002350269	A1	20030610	AU 2002-350269	20021125
US 2003199549	A1	20031023	US 2002-303205	20021125
US 6664273	B2	20031216		
EP 1448526	A1	20040825	EP 2002-786803	20021125
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
CN 1592739	A	20050309	CN 2002-823511	20021125
HU 2004002404	A2	20050329	HU 2004-2404	20021125
JP 2005510563	T	20050421	JP 2003-547370	20021125
ZA 2004003784	A	20050519	ZA 2004-3784	20040517
MX 2004PA04956	A	20040811	MX 2004-PA4956	20040525
PRIORITY APPLN. INFO.:			US 2001-333367P P	20011126
			WO 2002-US37956 W	20021125

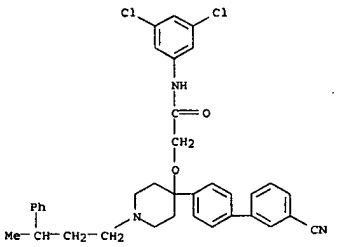
OTHER SOURCE(S): MARPAT 139:22111
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

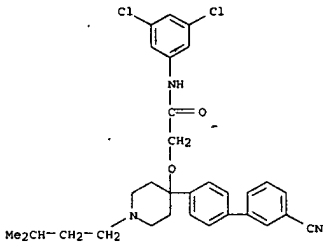
AB Title compds. I [Ar1, R10 = (un)substituted (hetero)aryl, etc.; R1 = H, alkyl, aryl, aryloxyalkyl, etc.; R2-3 = H, alkyl; m = 0-2; n = 0, 2] are prepared For instance, 4-(4-bromophenyl)-4-piperidinol is alkylated with cyclopentanone (CH2Cl2, HOAc, NaBH(OAc)3) and the product converted to the corresponding 4-amino derivative (CH3CN, H2SO4; HCl). This intermediate was coupled to 3-cyanophenylboronic acid (PhMe/MeOH, Pd(PPh3)4, Na2CO3) and subsequently alkylated with the appropriate bromoacetamide to give II. Compds. of the invention have Ki = 3 nM to 1500 nM for the melanin-concentrating

L4 ANSWER 22 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

L4 ANSWER 22 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
hormone (MCH) receptor. I are antagonists for MCH and are useful for the treatment of obesity, metabolic disorders, eating disorders such as hyperphagia, and diabetes.
IT 538322-56-4P 538324-03-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of piperidine-based MCH antagonists for treatment of obesity and CNS disorders)
RN 538322-56-4 CAPLUS
CN Acetamide, 2-[[4-(3'-cyano[1,1'-biphenyl]-4-yl)-1-(3-phenylbutyl)-4-piperidinyl]oxy]-N-(3,5-dichlorophenyl)- (CA INDEX NAME)



RN 538324-03-7 CAPLUS
CN Acetamide, 2-[[4-(3'-cyano[1,1'-biphenyl]-4-yl)-1-(3-methylbutyl)-4-piperidinyl]oxy]-N-(3,5-dichlorophenyl)- (CA INDEX NAME)



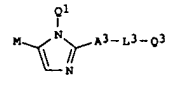
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 23 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2002:777907 CAPLUS
DOCUMENT NUMBER: 137:279192
TITLE: Imidazolyl derivatives useful as histamine H3 receptor ligands, and their pharmaceutical composition, preparation, and use
INVENTOR(S): Bogenstaetter, Michael; Carruthers, Nicholas I.; Jablonowski, Jill A.; Lovenberg, Timothy W.; Ly, Kiev S.
PATENT ASSIGNEE(S): Ortho McNeil Pharmaceutical, Inc., USA
SOURCE: PCT Int. Appl., 103 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

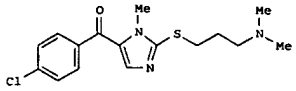
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002079168	A1	20021010	WO 2002-US9026	20020322
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2442326	A1	20021010	CA 2002-2442326	20020322
AU 2002306841	A1	20021015	AU 2002-306841	20020322
US 2002198237	A1	20021226	US 2002-104283	20020322
EP 1373218	A1	20040102	EP 2002-757803	20020322
EP 1373218	B1	20080109		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004524363	T	20040812	JP 2002-577795	20020322
AT 383343	T	20080115	AT 2002-757803	20020322
US 2004147577	A1	20040729	US 2004-757625	20040114
US 7265135	B2	20070904		
PRIORITY APPLN. INFO.:			US 2001-279802P P	20010329
			US 2002-104283 B1	20020322
			WO 2002-US9026 W	20020322

OTHER SOURCE(S): CASREACT 137:279192; MARPAT 137:279192
GI

L4 ANSWER 23 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



I



II

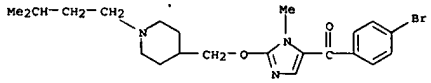
AB Pharmaceutically useful heterocyclic compds. I, their preparation, compns.
containing them, and methods of using them, for example, as histamine H3 receptor mediators, are disclosed. In formula I, Q1 is alkyl, haloalkyl, alkenyl; Q1 may be substituted with one or more of halo, cyano, OH, alkyl,
alkenyl, nitro, amino, etc.; M is CH2RM, CH(OH)RM, CORM, or C(:NOH)RM; RM is selected from alkyl, amino or its (halo)alkyl or alkenyl derivs., cycloalkyl, aryl, biaryl, heterocyclyl, etc.; RM may be substituted with one or more halo, cyano, OH, alkyl, nitro, amino, etc. Furthermore, A3 is
NH, NR3, S, S(O), S(O)2, or O; R3 is alkyl; L3 is C1-7 alkyl or alkenyl; L3 may be substituted with one or more halo, OH, OMe, and/or amino; or L3 is absent. Also, Q3 is selected from alkyl, haloalkyl, alkenyl, cycloalkyl, cycloalkenyl, aryl, 4-7 membered heterocyclyl, cycloalkyl-heterocyclyl, heterocyclyl-cycloalkyl, bi-(4-7 membered heterocyclyl), (un)substituted amino, azinoyl, cycloalkylsulfanyl, 4-7 membered heterocyclylsulfanyl, and 4-7 membered heterocyclyloxy. The group Q3 may be substituted with one or more halo, cyano, hydroxy, alkyl, haloalkyl, alkenyl, nitro, (un)substituted amino, amido, cycloalkyl, monocyclic 4-7 membered heterocyclyl, monocyclic 4-7 membered heterocyclylalkyl, etc. Alternatively, A3 and L3 are absent and Q3 is sulfanyl. Included are pharmaceutically acceptable esters, ethers, N-oxides, amides, salts, hydrates, and/or isotopically labeled forms. Approx. 100 compds. I were prepared as drug candidates, as intermediates, or
both. For example, lithiation of 2-mercapto-1-methylimidazole with t-BuLi
and reaction with 4-chlorobenzaldehyde gave an intermediate invention compound, (4-chlorophenyl)(2-mercapto-3-methyl-3H-imidazol-4-yl)methanol. This alc.-thiol was S-alkylated with Br(CH2)3Cl, oxidized to the ketone, and aminated at chloro by HNMe2.HCl, to give title compound II. In tests for inhibition of [3H]-N-methylhistamine binding to cloned human H3 histamine receptors expressed in SK-N-MC cells, 27 selected compds. I had typical Ki values in the range of 1.6 to 9 nM, e.g., 2 nM for compound II.

IT 465616-31-3P, (4-Bromophenyl)[3-methyl-2-[1-(3-methylbutyl)piperidin-4-ylmethoxy]-3H-imidazol-4-yl]methanone
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

L4 ANSWER 23 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
(drug candidate; prepn. of imidazolyl derivs. as histamine H3 receptor ligands)

RN 465616-31-3 CAPLUS

CN Methanone, (4-bromophenyl)[1-methyl-2-[[1-(3-methylbutyl)-4-piperidinyl]methoxy]-1H-imidazol-5-yl]- (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 24 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:31421 CAPLUS
DOCUMENT NUMBER: 136:102400
TITLE: Preparation of nonpeptide substituted spirobenzoazepines as vasopressin antagonists
INVENTOR(S): Chen, Robert H.; Xiang, Min A.
PATENT ASSIGNEE(S): Ortho-McNeil Pharmaceutical, Inc., USA
SOURCE: PCT Int. Appl., 106 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

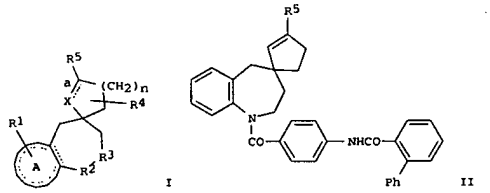
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002002531	A1	20020110	WO 2001-US21080	20010702
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2413945	A1	20020110	CA 2001-2413945	20010702
US 2003045517	A1	20030306	US 2001-897206	20010702
US 7001898	B2	20060221		
EP 1307430	A1	20030507	EP 2001-950821	20010702
EP 1307430	B1	20050928		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001012372	A	20030722	BR 2001-12372	20010702
HU 2003001590	A2	20030929	HU 2003-1590	20010702
JP 2004502677	T	20040129	JP 2002-507788	20010702
NZ 523450	A	20041126	NZ 2001-523450	20010702
AT 305454	T	20051015	AT 2001-950821	20010702
ES 2250432	T3	20060416	ES 2001-1950821	20010702
NO 2003000028	A	20030303	NO 2003-28	20030103
NO 324499	B1	20071029		
MX 2003PA00135	A	20050217	MX 2003-PA135	20030107
ZA 2003000972	A	20040504	ZA 2003-972	20030204
US 2006111567	A1	20060525	US 2003-440914	20030519
US 7238687	B2	20070703		
US 2007135409	A1	20070614	US 2006-549678	20061016
US 2007117790	A1	20070524	US 2006-564471	20061129

PRIORITY APPLN. INFO.:

US 2000-216220P	P	20000705	
US 2001-897206	A3	20010702	
WO 2001-US21080	W	20010702	
US 2003-440914	A3	20030519	

OTHER SOURCE(S): MARPAT 136:102400
GI

L4 ANSWER 24 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

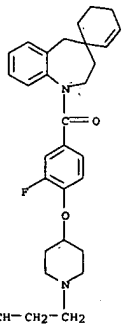


I II

AB The invention is directed to nonpeptide substituted benzodiazepines of formula [I; R1 is one to three members independently selected from H, halo, (un)substituted NH2, HO, alkyloxy, Ph, substituted Ph, alkylthio, arylthio, alkylsulfoxide, arylsulfoxide, alkylsulfone, and arylsulfone; R2-R3 = N(COR')-CH2 or CH2-N(COR') (wherein R' = (un)substituted alkyl, Ph, or heteroaryl, etc.); R4 is one or two members independently selected from the group consisting of H, and (un)substituted alkyl and phenyl; R5 =
H, alkyl, substituted alkyl, aldehyde, carboxy, (un)substituted alkoxycarbonyl, (CH2)kNZ1Z2 and CONZ1Z2 (wherein k = an integer from 1-4; Z1, Z2 = H, (un)substituted alkyl, heterocyclyl, or aminocarbonyl or N, Z1
and Z2 together form (un)substituted heterocyclyl or substituted heteroaryl); a represents a single or double bond provided that when R1 is
iodine, bromine, alkylthio, arylthio, alkylsulfone, or arylsulfone, a is a
double bond; A = aryl, naphthyl, heteroaryl; X = CH, CH2, CHOH, CO; and n = 1, 2, or 3] or optical isomers, enantiomers, diastereomers, or racemates
thereof, or pharmaceutically acceptable salts thereof. These compds. are useful as vasopressin receptor antagonists for treating conditions associated
with vasopressin receptor activity such as those involving increased vascular resistance and cardiac insufficiency. Also claimed are pharmaceutical compns. comprising a compound of formula I and methods of treating conditions such as inner ear disorders, hypertension, congestive heart failure, cardiac insufficiency, coronary vasospasm, cardiac ischemia, liver cirrhosis, renal vasospasm, renal failure, cerebral edema and ischemia, stroke, thrombosis, water retention, aggression, obsessive-compulsive disorders, dysmenorrhea, nephrotic syndrome, and central nervous injuries. Thus, NaBH4 reduction of 3'-formyl-4-aza-[6,4]-
spiro-[5,6]-benzoundec-2'-ene derivative (II; R5 = CHO) gave II (R5 = CH2OH)
(III). III and II (R5 = CONHCH2CH2NMe2) in vitro showed IC50 of <0.01 and
0.002 μM. resp., for inhibiting the vasopressin-stimulated increase in intracellular calcium mobilization in HEK-293 cell line expressing human V1a receptor.

IT 388600-68-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

L4 ANSWER 24 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
(Uses)
(prepn. of nonpeptide substituted spirobenzoazepines as vasopressin antagonists for therapeutic agents)
RN 388600-68-8 CAPLUS
CN Spiro[4H-1-benzazepine-4,1'-[2]cyclohexene], 1-[3-fluoro-4-[[1-(3-methylbutyl)-4-piperidinyl]oxy]benzoyl]-1,2,3,5-tetrahydro- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

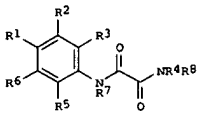
FORMAT

L4 ANSWER 25 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:631913 CAPLUS
DOCUMENT NUMBER: 135:195556
TITLE: Preparation of azolylphenyl oxamides as inosine monophosphate dehydrogenase (IMPDH) inhibitors
INVENTOR(S): Broadhurst, Michael John; Hill, Christopher Huw; Hurst, David Nigel; Jones, Philip Stephen; Kay, Paul Brittain; Kilford, Ian Reginald; Mckinnell, Robert Murray
PATENT ASSIGNEE(S): F. Hoffmann-La Roche A.-G., Switz.
SOURCE: Eur. Pat. Appl., 256 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1127883	A2	20010829	EP 2001-103521	20010216
EP 1127883	A3	20020807		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 2002052513	A1	20020502	US 2001-779116	20010208
US 6867299	B2	20050315		
CA 2337588	A1	20010824	CA 2001-2337588	20010220
HU 2001000836	A2	20011028	HU 2001-836	20010221
HR 2001000127	A1	20011231	HR 2001-127	20010221
NO 2001000900	A	20010827	NO 2001-900	20010222
CN 1310179	A	20010829	CN 2001-104906	20010223
BR 2001000790	A	20010925	BR 2001-790,	20010223
IN 2001MA00167	A	20050304	IN 2001-MA167	20010223
JP 2001261663	A	20010926	JP 2001-51064	20010226

PRIORITY APPLN. INFO.: GB 2000-4392 A 20000224
GB 2000-15877 A 20000628
GB 2000-20322 A 20000817

OTHER SOURCE(S): MARPAT 135:195556
GI

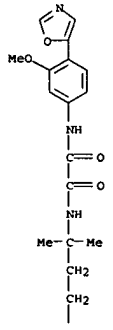


I

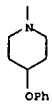
AB Title compds. (I; R1 = heterocyclyl; R2 = H, alkyl, alkoxy, halo, OH, cyano; R3 = H, alkyl, alkoxy, halo, cyano; R4 = H, alkyl, cycloalkyl, aryl, heterocyclyl; R5 = H, alkyl, alkoxy, halo, cyano; R6 = H, alkyl, alkoxy, halo, cyano; R7, R8 = H, alkyl; R4R8N = heterocyclyl), were prepared
Thus, 1,1-dimethyl-3-(4-nitrophenoxy)propylamine (preparation given) was coupled with N-[3-methoxy-4-(5-oxazolyl)phenyl]oxamic acid in the presence

L4 ANSWER 25 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
of 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide and 1-hydroxy-7-azabenzotriazole to give N-[3-methoxy-4-(5-oxazolyl)phenyl]-N'-[1,1-dimethyl-3-(4-nitrophenoxy)propyl]oxalamide. Tested I inhibited IMPDH with IC50 = 0.010-0.277 μM. I can be used for treating immune mediated conditions or diseases, viral diseases, bacterial diseases, parasitic diseases, inflammation, inflammatory diseases, hyperproliferative vascular
diseases, tumors, and cancer.
IT 357183-03-0P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of azolylphenyl oxamides as inosine monophosphate dehydrogenase
(IMPDH) inhibitors)
RN 357183-03-0 CAPLUS
CN Ethanediamide, N-[1,1-dimethyl-3-(4-phenoxy-1-piperidinyl)propyl]-N'-[3-methoxy-4-(5-oxazolyl)phenyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



L4 ANSWER 25 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

L4 ANSWER 26 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:545660 CAPLUS
DOCUMENT NUMBER: 135:137528
TITLE: Preparation of nitrogenous cyclic compounds and pharmaceutical compositions containing the same as calcium antagonists
INVENTOR(S): Yamamoto, Noboru; Suzuki, Yuichi; Kimura, Manami; Niidom, Tetsuhiro; Iimura, Yoichi; Teramoto, Tetsuyuki; Kaneda, Yoshihisa; Kaneko, Toshihiko; Kurusu, Nobuyuki; Shinmyo, Daisuke; Youskawa, Yukie; Hatakeyama, Shinji
PATENT ASSIGNEE(S): Eisai Co., Ltd., Japan
SOURCE: PCT Int. Appl., 289 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

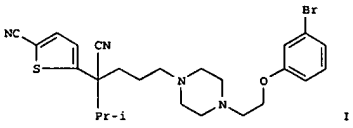
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001053258	A1	20010726	WO 2001-JP288	20010118
W: AU, BR, CA, CN, HU, IL, KR, MX, NO, NZ, RU, US, ZA				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
CA 2398409	A1	20010726	CA 2001-2398409	20010118
AU 200127059	A	20010731	AU 2001-27059	20010118
AU 779870	B2	20050217		
JP 2001270861	A	20011002	JP 2001-9591	20010118
JP 3966693	B2	20070829		
EP 1254895	A1	20021106	EP 2001-901413	20010118
EP 1254895	B1	20070523		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR				
BR 2001007733	A	20030311	BR 2001-7733	20010118
HU 2002004071	A2	20030328	HU 2002-4071	20010118
RU 2230060	C2	20040610	RU 2002-122335	20010118
NZ 519981	A	20050225	NZ 2001-519981	20010118
AT 362926	T	20070615	AT 2001-901413	20010118
EP 1818326	A1	20070815	EP 2006-16525	20010118
R: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE, TR				
ZA 2002005322	A	20030818	ZA 2002-5322	20020703
US 6906072	B1	20050614	US 2002-169837	20020710
NO 2002003456	A	20020920	NO 2002-3456	20020718
MX 2002PA07035	A	20021213	MX 2002-PA7035	20020718
US 2004220193	A1	20041104	US 2004-855357	20040528
AU 2005201992	A1	20050602	AU 2005-201992	20050510
US 2006084658	A1	20060420	US 2005-229768	20050920
KR 2007015639	A	20070205	KR 2007-701002	20070115

PRIORITY APPLN. INFO.:

JP 2000-12176	A	20000120
AU 2001-27059	A3	20010118
EP 2001-901413	A3	20010118
WO 2001-JP288	W	20010118
US 2002-169837	A3	20020710
KR 2002-709235	A3	20020718

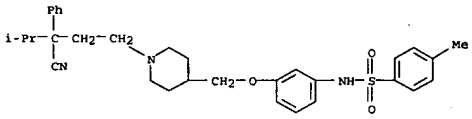
L4 ANSWER 26 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
US 2004-855357 A3 20040528

OTHER SOURCE(S): MARPAT 135:137528
GI



I

AB Title compds. {ArCR1(CN)D1ED2AW1XW2B; Ar is a group derived from an optionally substituted 5- to 14-membered aromatic ring; ring A is one member selected from among piperazine, homopiperazine, and piperidine; ring B is an optionally substituted C3-14 hydrocarbon ring; E is a single bond, CO; R1 is hydrogen, halogeno, or hydroxyl; D1, D2, W1, W2 are each independently a single bond or optionally substituted C1-6 alkylene; X is a single bond, oxygen], salts, and hydrates are prepared as calcium antagonists, particularly neuroselective calcium antagonists, and are used in pharmaceutical comps. Thus, title compound I was prepared and biol. tested for calcium antagonism.
IT 350853-18-8P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of nitrogenous cyclic compound as calcium antagonists)
RN 350853-18-8 CAPLUS
CN Benzenesulfonamide, N-[3-[[1-(3-cyano-4-methyl-3-phenylpentyl)-4-piperidinyl]methoxy]phenyl]-4-methyl- (CA INDEX NAME)



REFERENCE COUNT: 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 27 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:608717 CAPLUS
DOCUMENT NUMBER: 133:207678
TITLE: Preparation of sulfonamide derivs. as amyloid β production inhibitors useful in treating or preventing diseases related to Aβ
INVENTOR(S): Smith, David W.; Munoz, Benito; Srinivasan, Kumar; Bergstrom, Carl P.; Chaturvedula, Prasad V.; Deshpande, Milind S.; Keavy, Daniel J.; Lau, Wai Yu; Parker, Michael F.; Sloan, Charles P.; Wallace, Owen B.; Wang, Henry Hui
PATENT ASSIGNEE(S): Merck & Co., Inc., USA; Bristol-Myers Squibb Company
SOURCE: PCT Int. Appl., 377 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

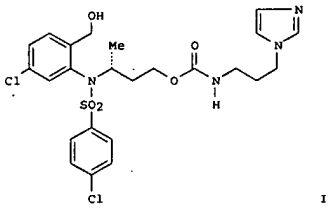
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000050391	A1	20000831	WO 2000-US4560	20000222
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2366919	A1	20000831	CA 2000-2366919	20000222
EP 1159263	A1	20011205	EP 2000-910293	20000222
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 2000008965	A	20020226	BR 2000-8965	20000222
HU 2002001020	A2	20020729	HU 2002-1020	20000222
HU 2002001020	A3	20030428		
JP 2002537376	T	20021105	JP 2000-600975	20000222
NZ 514453	A	20030429	NZ 2000-514453	20000222
AU 773273	B2	20040520	AU 2000-32410	20000222
IN 2001DN00714	A	20050311	IN 2001-DN714	20010809
ZA 2001006646	A	20021113	ZA 2001-6646	20010813
NO 2001004135	A	20010927	NO 2001-4135	20010824
MX 2001PA08606	A	20030505	MX 2001-PA8606	20010824
US 6967196	B1	20051122	US 2002-890927	20020219

PRIORITY APPLN. INFO.:

US 1999-121906P	P	19990226
US 1999-122746P	P	19990226
US 1999-122748P	P	19990226
US 1999-130994P	P	19990423
US 1999-130995P	A2	19990423
WO 2000-US4560	W	20000222

OTHER SOURCE(S): MARPAT 133:207678
GI

L4 ANSWER 27 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

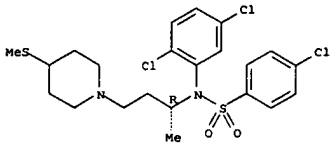


I

AB Title compds. {(D)(G)CHN(E)SO2(J); D = H, alkyl, heterocycle, halo, alkoxyl, ester, amide; G = alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, cycloalkynyl, (CHR1)nO(CHR2)mCONR3R4, heterocycle, aryl, amine, amide, ester, ether, carbamate; D-G = cyclic; n = 1, 2, 3, 4; m = 0, 1, 2, 3, 4; R1, R2, R3, R4 are independently H, alkyl; R3-R4 = cyclic; E = H, alkyl, alkenyl, alkynyl, heterocycle, aryl, alkoxyl, amide, sulfonyl, sulfonamidyl, sulfide; J = alkyl, alkenyl, alkynyl, aryl, heterocycle, polycyclic; J-E = cyclic}, pharmaceutically acceptable salts, and composition comprising title compds. are prepared Title compds. can act to modulate production of amyloid β protein (APP751, APP695wt, APP670/671, APP670/671/717, sAPP, α-sAPP, β-sAPP) and are useful in the prevention or treatment of a variety of diseases; such diseases are amyloid angiopathy, cerebral amyloid angiopathy, systemic amyloidosis, Alzheimer's disease, hereditary cerebral hemorrhage with amyloidosis of the Dutch type, inclusion body myositis, and Down's syndrome. Thus, the title compound I was prepared and tested.
IT 290328-62-0P 290328-63-1P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of sulfonamide derivs. as amyloid β production inhibitors useful in treating or preventing diseases related to Aβ)
RN 290328-62-0 CAPLUS
CN Benzenesulfonamide, 4-chloro-N-(2,5-dichlorophenyl)-N-[(1R)-1-methyl-3-[4-(methylthio)-1-piperidinyl]propyl]- (CA INDEX NAME)

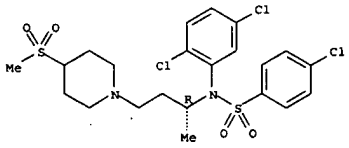
Absolute stereochemistry.

L4 ANSWER 27 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



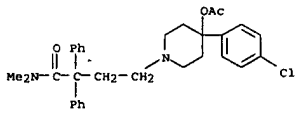
RN 290328-63-1 CAPLUS
CN Benzenesulfonamide,
4-chloro-N-(2,5-dichlorophenyl)-N-[(1R)-1-methyl-3-[4-(methylsulfonyl)-1-piperidinyl]propyl]- , (CA INDEX NAME)

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L4 ANSWER 28 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L4 ANSWER 28 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:507398 CAPLUS
DOCUMENT NUMBER: 133:261037
TITLE: Quantitation of loperamide and N-demethyl-loperamide in human plasma using electrospray ionization with selected reaction ion monitoring liquid chromatography-mass spectrometry
AUTHOR(S): He, H.; Sadeque, A.; Erve, J. C. L.; Wood, A. J. J.; Hachey, D. L.
CORPORATE SOURCE: Department of Pharmacology and the Mass Spectrometry Research Center, Vanderbilt University School of Medicine, Nashville, TN, 37232-6602, USA
SOURCE: Journal of Chromatography, B: Biomedical Sciences and Applications (2000), 744(2), 323-331
CODEN: JCBBEP; ISSN: 0378-4347
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB We report here the development and validation of an LC-MS method for quantitation of loperamide (LOP) and its N-demethyl metabolite (DMLOP) in human plasma. O-Acetyl-loperamide (A-LOP) was synthesized by us for use as an internal standard in the assay. After addition of the internal standard, the compds. of interest were extracted with Me tert.-butylether and separated by HPLC on a C18 reversed-phase column using an acetonitrile-water gradient containing 20 mM ammonium acetate. The three compds. were well separated by HPLC and no interfering peaks were detected at the usual concns. found in plasma. Analytes were quantitated using pos. electrospray ionization in a triple quadrupole mass spectrometer operating in the MS-MS mode. Selected reaction monitoring was used to quantify LOP (m/z 477 266), DMLOP (m/z 463 252) and A-LOP (m/z 519 266) on ions formed by loss of the 4-(p-chlorophenyl)-4-hydroxy-piperidyl group upon low energy collision-induced dissociation Calibration curves, which were linear over the range 1.04 to 41.7 pmol/mL (LOP) and 1.55 to 41.9 pmol/mL (DMLOP), were run contemporaneously with each batch of samples, along with low (4.2 pmol/mL), medium (16.7 pmol/mL) and high (33.4 pmol/mL) quality control samples. The lower limit of quantitation (LLQ) of LOP and DMLOP was about 0.25 pmol/mL in plasma. The extraction efficiency of LOP and DMLOP from human plasma was 72.3±1.50% (range: 70.7-73.7%) and 79.4±12.8% (64.9-88.8%), resp. The intra- and inter-assay variability of LOP and DMLOP ranged from 2.1 to 14.5% for the low, medium and high quality control samples. The method has been used successfully to study loperamide pharmacokinetics in adult humans.

IT 296777-82-7
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(loperamide and N-demethyl-loperamide quantitation in human plasma by electrospray ionization with selected reaction ion monitoring LC-MS)
RN 296777-82-7 CAPLUS
CN 1-Piperidinebutanamide, 4-(acetyloxy)-4-(4-chlorophenyl)-N,N-dimethyl-α,α-diphenyl- (CA INDEX NAME)

L4 ANSWER 29 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2000:457066 CAPLUS
DOCUMENT NUMBER: 133:74024
TITLE: Preparation of azolylpiperidines as CCR5 receptor modulators.
INVENTOR(S): Armour, Duncan Robert; Price, David Anthony; Stammen, Blanda Luzia Christa; Wood, Anthony; Perros, Manoussos; Edwards, Martin Paul
PATENT ASSIGNEE(S): Pfizer Limited, UK; Pfizer Inc.
SOURCE: PCT Int. Appl., 222 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000039125	A1	20000706	WO 1999-IB1913	19991201
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 7217714	B1	20070515	US 1999-451826	19991130
CA 2350573	A1	20000706	CA 1999-2350573	19991201
CA 2350573	C	20070130		
EP 1140920	A1	20011010	EP 1999-956267	19991201
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 9916585	A	20011016	BR 1999-16585	19991201
TR 200101867	T2	20011121	TR 2001-1867	19991201
TR 200200938	T2	20020521	TR 2002-938	19991201
JP 2002533461	T	20021008	JP 2000-591036	19991201
JP 3522691	B2	20040426		
EE 200100344	A	20021015	EE 2001-344	19991201
HU 2001004910	A2	20021028	HU 2001-4910	19991201
HU 2001004910	A3	20031229		
NZ 511796	A	20031128	NZ 1999-511796	19991201
AU 769449	B2	20040129	AU 2000-12904	19991201
ZA 2001004211	A	20020114	ZA 2001-4211	20010523
ZA 2001004254	A	20021101	ZA 2001-4254	20010524
NO 2001003149	A	20010823	NO 2001-3149	20010622
MX 2001PA06569	A	20011203	MX 2001-PA6569	20010625
HR 2001000478	A1	20020630	HR 2001-478	20010625
BG 105709	A	20020228	BG 2001-105709	20010716
HK 1039942	A1	20041203	HK 2002-101506	20020227
JP 2004099618	A	20040402	JP 2003-358714	20031020

PRIORITY APPLN. INFO.:

GB 1998-28420	A	19981223
GB 1999-22009	A	19990918
JP 2000-591036	A3	19991201
WO 1999-IB1913	W	19991201

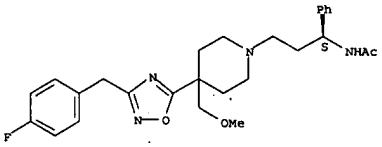
OTHER SOURCE(S): MARPAT 133:74024
AB RaRbRcRd [Ra = (substituted) arylalkylheterocyclyl, amidoaryl,

amidoheterocyclyl; Rb = (substituted) ethylene bridging element; Rc = (substituted) azamonocyclyl; Rd = (substituted) heterocyclyl], were prepd.
as CCR5 receptor modulators (no data). Thus, 4-(3-benzyl-1,2,4-oxadiazol-
5-yl)piperidine (prepn. given), N-[(1S)-3-oxo-1-phenylpropyl]cyclobutanecarboxamide, and Na(AcO)3BH were stirred in CH2Cl2/HOAc to give N-[(1S)-3-[4-(3-benzyl-1,2,4-oxadiazol-5-yl)-1-piperidinyl]-1-phenylpropyl]cyclobutanecarboxamide.

IT 280110-20-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of azolylpiperidines as CCR5 receptor modulators)

RN 280110-20-5 CAPLUS
CN Acetamide, N-[(1S)-3-[4-[3-[(4-fluorophenyl)methyl]-1,2,4-oxadiazol-5-yl]-4-(methoxymethyl)-1-piperidinyl]-1-phenylpropyl]- (CA INDEX NAME)

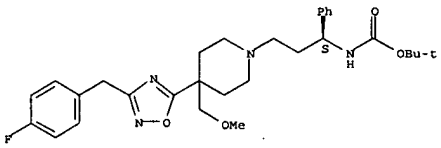
Absolute stereochemistry.



IT 280111-69-5P 280111-70-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of azolylpiperidines as CCR5 receptor modulators)

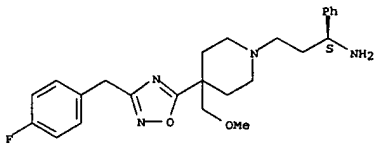
RN 280111-69-5 CAPLUS
CN Carbamic acid, [(1S)-3-[4-[3-[(4-fluorophenyl)methyl]-1,2,4-oxadiazol-5-yl]-4-(methoxymethyl)-1-piperidinyl]-1-phenylpropyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 280111-70-8 CAPLUS
CN 1-Piperidinepropanamine, 4-[3-[(4-fluorophenyl)methyl]-1,2,4-oxadiazol-5-yl]-4-(methoxymethyl)-α-phenyl-, (αS)- (CA INDEX NAME)

Absolute stereochemistry.



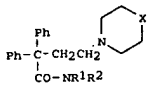
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 30 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

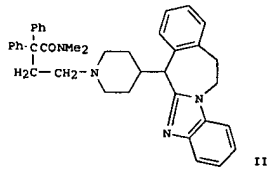
ACCESSION NUMBER: 1999:576930 CAPLUS
DOCUMENT NUMBER: 131:199712
TITLE: Preparation of heterocyclic compounds as glycine transport inhibitors
INVENTOR(S): Luyten, Walter Herman Maria Louis; Janssens, Frans Eduard; Kennis, Ludo Edmond Josephine
PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.
SOURCE: PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9945011	A1	19990910	WO 1999-EP1308	19990226
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2322136	A1	19990910	CA 1999-2322136	19990226
AU 9932544	A	19990920	AU 1999-32544	19990226
BR 9907953	A	20001024	BR 1999-7953	19990226
EP 1058684	A1	20001213	EP 1999-937930	19990226
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO				
TR 200002570	T2	20001221	TR 2000-2570	19990226
HU 2001001281	A2	20010928	HU 2001-1281	19990226
HU 2001001281	A3	20011128		
EE 200000483	A	20020215	EE 2000-483	19990226
JP 2002505332	T	20020219	JP 2000-534553	19990226
IN 2000MN00192	A	20050304	IN 2000-MN192	20000718
HR 2000000524	A1	20010228	HR 2000-524	20000802
BG 104686	A	20010430	BG 2000-104686	20000811
NO 2000004432	A	20001102	NO 2000-4432	20000905
MX 2000PA08692	A	20010328	MX 2000-PA8692	20000905
PRIORITY APPLN. INFO.:			EP 1998-200700 A	19980306
			WO 1999-EP1308 W	19990226

OTHER SOURCE(S): MARPAT 131:199712
GI



I



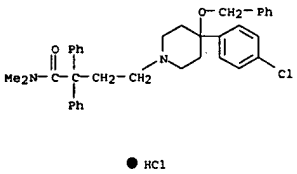
II

AB The present invention is concerned with the use of glycine transport inhibiting α,α-diphenyl-1-piperidinebutanamides for the preparation of medicaments, title compds. I (R1, R2, = H, alkyl; X = CR4R5; R4 = H, OH, etc.; R5 = diarylmethyloxyalkyl, etc) for treating disorders of the central and peripheral nervous system, in particular psychoses, pain, epilepsy, neurodegenerative diseases (Alzheimer's disease), stroke, head trauma, multiple sclerosis and the like. The title compound II was prepared
Formulations are given. The invention further comprises novel compds., their preparation and their pharmaceutical forms. The bioactivity of II was
demonstrated.

IT 241130-12-1P 241130-34-7P 241130-45-0P
241130-75-6P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of heterocyclic compds. as glycine transport inhibitors)

RN 241130-12-1 CAPLUS
CN 1-Piperidinebutanamide, 4-(4-chlorophenyl)-N,N-dimethyl-α,α-diphenyl-4-(phenylmethoxy)-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 30 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

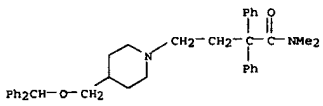


● HCl

RN 241130-34-7 CAPLUS
CN 1-Piperidinebutanamide, 4-[(diphenylmethoxy)methyl]-N,N-dimethyl-α,α-diphenyl-, ethanedioate (2:5) (CA INDEX NAME)

CM 1

CRN 241130-33-6
CMF C37 H42 N2 O2



CM 2

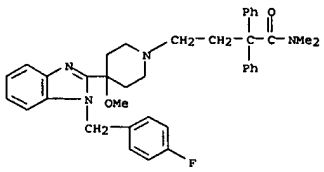
CRN 144-62-7
CMF C2 H2 O4

RN 241130-45-0 CAPLUS
CN 1-Piperidinebutanamide, 4-[1-[(4-fluorophenyl)methyl]-1H-benzimidazol-2-yl]-4-methoxy-N,N-dimethyl-α,α-diphenyl-, (2E)-2-butenedioate (1:1) (CA INDEX NAME)

CM 1

CRN 241130-44-9
CMF C38 H41 F N4 O2

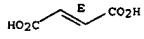
L4 ANSWER 30 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



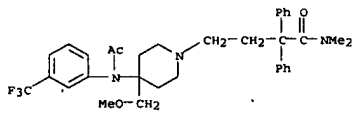
CM 2

CRN 110-17-8
CMF C4 H4 O4

Double bond geometry as shown.



RN 241130-75-6 CAPLUS
CN 1-Piperidinebutanamide, 4-[acetyl[3-(trifluoromethyl)phenyl]amino]-4-(methoxymethyl)-N,N-dimethyl-α,α-diphenyl- (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

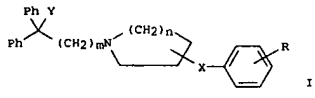
FORMAT

L4 ANSWER 31 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:236513 CAPLUS
DOCUMENT NUMBER: 130:320849
TITLE: N-Substituted cyclic amines, their preparation, and pharmaceuticals for treatment of irritable bowel syndrome
INVENTOR(S): Miyaji, Hiroyuki; Hoshino, Masato; Kono, Yasushi; Ando, Naomoto; Takahashi, Yukie; Awano, Katsunari; Kobayashi, Fumiyoshi
PATENT ASSIGNEE(S): Kyorin Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11100366	A	19990413	JP 1997-281275	19970929
PRIORITY APPLN. INFO.:			JP 1997-281275	19970929

OTHER SOURCE(S): MARPAT 130:320849
GI

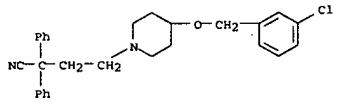


AB Title pharmaceuticals contain cyclic amines I (R = H, lower alkoxy, halo; X = OCH2, SCH2, SOCH2, SO2CH2, NHCO, NR1CH2; R1 = H, lower acyl; Y = CONH2; m = 2, 3; n = 1, 2) or their salts prepared by hydrolysis of I (Y = cyano). Methods for preparation of I (Y = cyano) are also claimed. 1-Tert-butoxycarbonyl-3-(4-chlorobenzylthio)pyrrolidine (7.25 g) was treated with CF3CO2H and condensed with 6.63 g 4-bromo-2,2-diphenylbutyronitrile in the presence of Et3N and NMP at 140° for 1.5 h to give 6.30 g I [XC6H4R = 3-(SCH2C6H4Cl-4), Y = cyano, m = 2, n = 1], 1.00 g which was hydrolyzed with KOH in t-BuOH to give 630 mg I [XC6H4R = 3-(SCH2C6H4Cl-4), Y = CONH2, m = 2, n = 1]. The products show selective and strong antagonism against smooth muscle muscarine receptors.

IT 223692-49-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of N-substituted cyclic amines as muscarine receptor antagonists for treatment of irritable bowel syndrome)

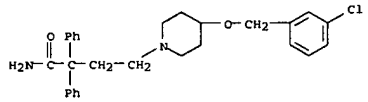
RN 223692-49-7 CAPLUS
CN 1-Piperidinebutanenitrile, 4-[(3-chlorophenyl)methoxy]-α,α-diphenyl- (CA INDEX NAME)

L4 ANSWER 31 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



IT 223692-51-1P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of N-substituted cyclic amines as muscarine receptor antagonists for treatment of irritable bowel syndrome)

RN 223692-51-1 CAPLUS
CN 1-Piperidinebutanamide, 4-[(3-chlorophenyl)methoxy]-α,α-diphenyl- (CA INDEX NAME)



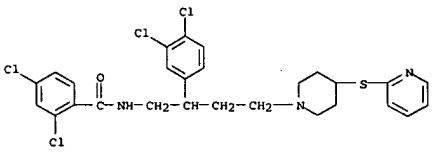
L4 ANSWER 32 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:126827 CAPLUS
DOCUMENT NUMBER: 130:191898
TITLE: Substance P inhibitors in combination with NMDA blockers for treating pain
INVENTOR(S): Caruso, Frank S.
PATENT ASSIGNEE(S): Algos Pharmaceutical Corporation, USA
SOURCE: PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9907413	A1	19990218	WO 1998-US10707	19980526
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9876960	A	19990301	AU 1998-76960	19980526
PRIORITY APPLN. INFO.:			US 1997-55233P P	19970811
			WO 1998-US10707 W	19980526

AB The analgesic effectiveness of a substance P receptor antagonist is significantly potentiated by administering a substance P receptor antagonist with a nontoxic NMDA receptor antagonist and/or a nontoxic substance that blocks at least one major intracellular consequence of NMDA receptor activation.

IT 147611-45-8
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(substance P inhibitor-NMDA blocker combination for treating pain)

RN 147611-45-8 CAPLUS
CN Benzamide, 2,4-dichloro-N-[2-(3,4-dichlorophenyl)-4-[4-(2-pyridinylthio)-1-piperidinyl]butyl]- (CA INDEX NAME)

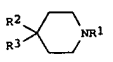


L4 ANSWER 32 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 33 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1999:96124 CAPLUS
DOCUMENT NUMBER: 130:168242
TITLE: Preparation of 1-(4-sulfonamidobutyl)piperidines and related compounds as modulators of chemokine receptor activity.
INVENTOR(S): Caldwell, Charles G.; Finke, Paul E.; Maccoss, Malcolm; Meurer, Laura C.; Mills, Sander G.; Oates, Bryan
PATENT ASSIGNEE(S): Merck & Co., Inc., USA
SOURCE: PCT Int. Appl., 281 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9904794	A1	19990204	WO 1998-US14990	19980721
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HR, HU, ID, IL, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2296314	A1	19990204	CA 1998-2296314	19980721
AU 9885760	A	19990216	AU 1998-85760	19980721
EP 1003514	A1	20000531	EP 1998-936920	19980721
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, MC, PT, IE, FI				
US 6136827	A	20001024	US 1998-120010	19980721
JP 2002510327	T	20020402	JP 1999-509949	19980721
PRIORITY APPLN. INFO.:			US 1997-53754P P	19970725
			GB 1998-958 A	19980116
			WO 1998-US14990 W	19980721

OTHER SOURCE(S): MARPAT 130:168242
GI

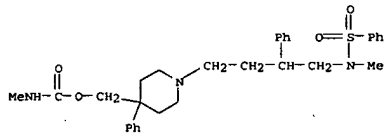


AB Title compds. [I; R1 = (substituted) alkyl; R2 = H, OH, alkyl, alkoxy, Ph, NMeCONHMe, NHCO2Me, Ac; R3 = aryl, aralkyl, aralkoxyalkyl, (substituted) aralkoxycarbonylamino, etc.], were prepared for treatment of AIDS (no data). Thus, N-(2-phenyl-4-oxobut-1-yl)-N-methylbenzenesulfonamide (preparation given) was stirred 20 min. with 4-phenylpiperidine, HOAc, and 3A mol. sieves in THF; Na triacetoxyborohydride was added and the mixture was kept 16 h to give N-[2-phenyl-4-(4-phenylpiperidin-1-yl)but-1-yl]-N-

L4 ANSWER 33 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
methylbenzenesulfonamide hydrochloride.

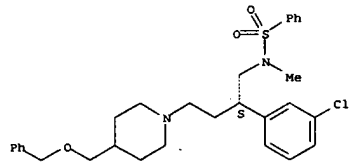
IT 220392-83-6P 220393-82-8P 220393-89-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 1-(4-sulfonamidobutyl)piperidines and related compds. as modulators of chemokine receptor activity)

RN 220392-83-6 CAPLUS
CN Benzenesulfonamide, N-methyl-N-[4-[4-[[[(methylamino)carbonyl]oxy]methyl]-4-phenyl-1-piperidinyl]-2-phenylbutyl]- (CA INDEX NAME)



RN 220393-82-8 CAPLUS
CN Benzenesulfonamide, N-[(2S)-2-(3-chlorophenyl)-4-[4-[(phenylmethoxy)methyl]-1-piperidinyl]butyl]-N-methyl- (CA INDEX NAME)

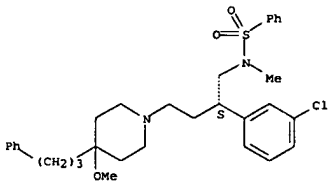
Absolute stereochemistry.



RN 220393-89-5 CAPLUS
CN Benzenesulfonamide, N-[(2S)-2-(3-chlorophenyl)-4-[4-methoxy-4-(3-phenylpropyl)-1-piperidinyl]butyl]-N-methyl- (CA INDEX NAME)

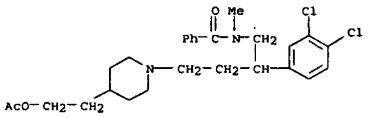
Absolute stereochemistry.

L4 ANSWER 33 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L4 ANSWER 34 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1998:515956 CAPLUS
DOCUMENT NUMBER: 129:225292
TITLE: 4-Alkylpiperidines related to SR-48968: potent antagonists of the neurokinin-2 (NK2) receptor
AUTHOR(S): Jacobs, Robert T.; Shenvi, Ashok B.; Mauger, Russell C.; Ulatowski, Terrance G.; Aharony, David; Buckner, Carl K.
CORPORATE SOURCE: Department of Medicinal Chemistry, a Business Unit of ZENECA, Inc., ZENECA Pharmaceuticals, Wilmington, DE, 19850-5437, USA
SOURCE: Bioorganic & Medicinal Chemistry Letters (1998), 8(14), 1935-1940
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A series of 4-alkylpiperidine derivs. related to the potent neurokinin-2 (NK2) receptor antagonist SR-48968 (1) is described. Simple aliphatic derivs. were found to be poorly active, but appropriate placement of an alc. functional group afforded compds. that were of similar activity to 1.
Several representatives in this series, such as the 4-(1-hydroxy-1-ethylpropyl)piperidine (14), were found to exhibit oral activity in a model of labored abdominal breathing in guinea pigs. These results expand
the latitude of substituents available in this region of this series of NK2 receptor antagonists.
IT 212910-72-0
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(NK2 receptor antagonist activity of 4-Alkylpiperidines related to SR-48968)
RN 212910-72-0 CAPLUS
CN Benzamide, N-[4-[4-[2-(acetyloxy)ethyl]-1-piperidinyl]-2-(3,4-dichlorophenyl)butyl]-N-methyl- (CA INDEX NAME)



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

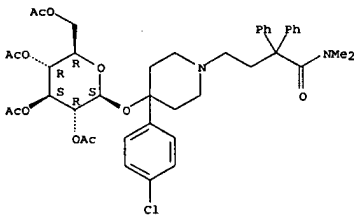
L4 ANSWER 35 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1997:518937 CAPLUS
DOCUMENT NUMBER: 127:136035
TITLE: Glycoconjugates of opioids
INVENTOR(S): Cowie, Diana; Valencia Paera, Gregori
PATENT ASSIGNEE(S): Farmhispania, S.A., Spain; Cowie, Diana; Valencia Parera, Gregori
SOURCE: PCT Int. Appl., 95 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Spanish
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9721416	A2	19970619	WO 1996-ES214	19961115
WO 9721416	A3	19970912		
W: CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2211596	A1	19970619	CA 1996-2211596	19961115
EP 816375	A1	19980107	EP 1996-938222	19961115
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 10513485	T	19981222	JP 1996-521758	19961115
PRIORITY APPLN. INFO.:			ES 1995-2346 A	19951129
			WO 1996-ES214 W	19961115

OTHER SOURCE(S): MARPAT 127:136035
AB Glycoconjugates of biol. active opioids were prepared which have at least one residue of carbohydrate linked to the opioid via an O- or C-glycoside bond. Thus, 6-morphinyl-β-D-glucopyranoside acetate was prepared by reaction of tetra-acetyl-α-D-glucopyranosyl bromide with 3-O-acetylmorphine, followed by saponification with MeONa-MeOH.
IT 192769-38-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of glycoconjugates of opioids)
RN 192769-38-3 CAPLUS
CN 1-Piperidinebutanamide, 4-(4-chlorophenyl)-N,N-dimethyl-α,α-diphenyl-4-[(2,3,4,6-tetra-O-acetyl-β-D-glucopyranosyl)oxy]- (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 35 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

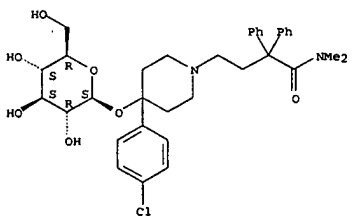


IT 192768-81-3P 192768-83-5P 192768-85-7P
192768-87-9P 192768-89-1P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of glycoconjugates of opioids)
RN 192768-81-3 CAPLUS
CN 1-Piperidinebutanamide, 4-(4-chlorophenyl)-4-(β-D-glucopyranosyloxy)-N,N-dimethyl-α,α-diphenyl-, monoacetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 192768-80-2
CMF C35 H43 Cl N2 O7

Absolute stereochemistry.



CM 2

CRN 64-19-7
CMF C2 H4 O2

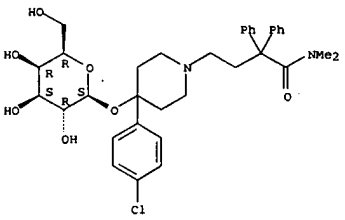
L4 ANSWER 35 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 192768-83-5 CAPLUS
CN 1-Piperidinebutanamide, 4-(4-chlorophenyl)-4-(β-D-galactopyranosyloxy)-N,N-dimethyl-α,α-diphenyl-, monoacetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 192768-82-4
CMF C35 H43 Cl N2 O7

Absolute stereochemistry.



CM 2

CRN 64-19-7
CMF C2 H4 O2

RN 192768-85-7 CAPLUS
CN β-D-Galactopyranosiduronic acid, 4-(4-chlorophenyl)-1-[4-(dimethylamino)-4-oxo-3,3-diphenylbutyl]-4-piperidinyl, monoacetate (salt)
(9CI) (CA INDEX NAME)

CM 1

CRN 192768-84-6
CMF C35 H41 Cl N2 O8

Absolute stereochemistry.

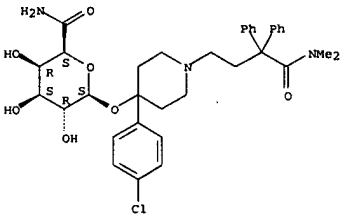
L4 ANSWER 35 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
CRN 64-19-7
CMF C2 H4 O2

RN 192768-89-1 CAPLUS
CN β-D-Galactopyranosiduronamide, 4-(4-chlorophenyl)-1-[4-(dimethylamino)-4-oxo-3,3-diphenylbutyl]-4-piperidinyl, monoacetate (salt)
(9CI) (CA INDEX NAME)

CM 1

CRN 192768-88-0
CMF C35 H42 Cl N3 O7

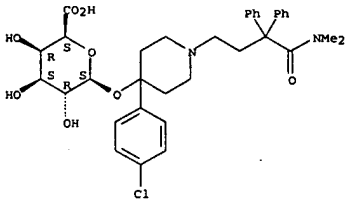
Absolute stereochemistry.



CM 2

CRN 64-19-7
CMF C2 H4 O2

L4 ANSWER 35 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



CM 2

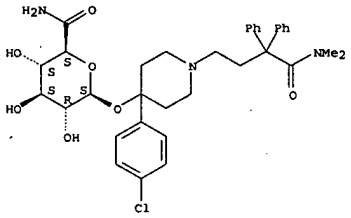
CRN 64-19-7
CMF C2 H4 O2

RN 192768-87-9 CAPLUS
CN β-D-Glucopyranosiduronamide, 4-(4-chlorophenyl)-1-[4-(dimethylamino)-4-oxo-3,3-diphenylbutyl]-4-piperidinyl, monoacetate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 192768-86-8
CMF C35 H42 Cl N3 O7

Absolute stereochemistry.



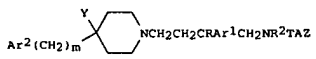
CM 2

L4 ANSWER 36 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

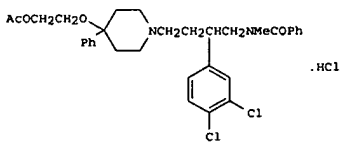
ACCESSION NUMBER:	1997:374707 CAPLUS
DOCUMENT NUMBER:	126:343496
TITLE:	Preparation of piperidine derivatives as neurokinin antagonists
INVENTOR(S):	Chabert, Nathalie; Emonds Alt, Xavier; Proietto, Vincenzo; Ducoux, Jean Philippe; Gueule, Patrick; Van Broeck, Didier
PATENT ASSIGNEE(S):	Sanofi, Fr.
SOURCE:	Fr. Demande, 96 pp. CODEN: FRXXBL
DOCUMENT TYPE:	Patent
LANGUAGE:	French
FAMILY ACC. NUM. COUNT:	1
PATENT INFORMATION:	

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2738245	A1	19970307	FR 1995-10142	19950828
FR 2738245	B1	19971121		
GB 2304714	A	19970326	GB 1996-17893	19960828
GB 2304714	B	19990915		
BE 1009571	A3	19970506	BE 1996-723	19960828
JP 09124600	A	19970513	JP 1996-227222	19960828
US 5830906	A	19981103	US 1996-703952	19960828
CH 690437	A5	20000915	CH 1996-2120	19960828
US 5939411	A	19990817	US 1997-916952	19970825
US 5965580	A	19991012	US 1998-35823	19980306
PRIORITY APPLN. INFO.:			FR 1995-10142 A	19950828
			US 1996-703952 A3	19960828

OTHER SOURCE(S): MARPAT 126:343496
GI



I



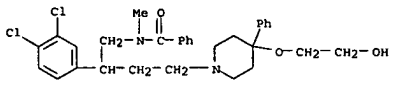
II

AB Piperidines I [R1 = H, R2 = H, alkyl; R1R2 = (CH2)nQ; Q = CO, CH2; n = 1-3; m = 0, 1; Y= (un)substituted alkyl, OH, NH2, CONH2, thiazolyl; Ar1 =
(un)substituted Ph, thienyl, benzothienyl, naphthyl, indolyl, imidazolyl, pyridyl, biphenyl; Ar2 = (un)substituted Ph, pyridyl, pyrimidyl, thienyl, imidazolyl; T = CH2, CO, (un)substituted CONH, CO2; A = CH2, CH2CH2; Z = (un)substituted aromatic, heteroarom.] were prepared for use in the treatment

L4 ANSWER 36 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
of neurokinin- and substance P-dependent diseases (no data). Thus, piperidine II was prepd. from HOCH2CH2CH(C6H3Cl2-3,4)CH2NH2 by conversion to the N-methylbenzamide, benzenesulfonylation, amination with 4-(2-hydroxyethyl)-4-phenylpiperidine (III), and acetylation. III was obtained from 1-benzyl-4-hydroxy-4-phenylpiperidine by benzoylation, reaction with ethylene glycol, and debenzylation.

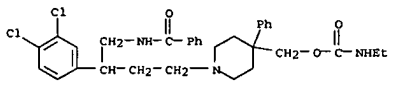
IT 189877-14-3P 189877-29-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of aminoalkylpiperidines as neurokinin antagonists)

RN 189877-14-3 CAPLUS
CN Benzamide, N-[2-(3,4-dichlorophenyl)-4-[4-(2-hydroxyethoxy)-4-phenyl-1-piperidinyl]butyl]-N-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 189877-29-0 CAPLUS
CN Carbamic acid, ethyl-, [1-[4-(benzoylamino)-3-(3,4-dichlorophenyl)butyl]-4-phenyl-4-piperidinyl]methyl ester, monohydrochloride (9CI) (CA INDEX NAME)

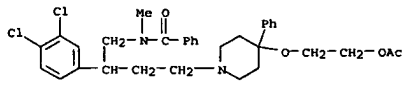


● HCl

IT 189877-15-4P 189877-16-5P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of aminoalkylpiperidines as neurokinin antagonists)

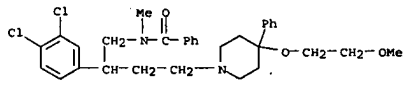
RN 189877-15-4 CAPLUS
CN Benzamide, N-[4-[4-[2-(acetyloxy)ethoxy]-4-phenyl-1-piperidinyl]-2-(3,4-dichlorophenyl)butyl]-N-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 36 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



● HCl

RN 189877-16-5 CAPLUS
CN Benzamide, N-[2-(3,4-dichlorophenyl)-4-[4-(2-methoxyethoxy)-4-phenyl-1-piperidinyl]butyl]-N-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

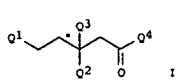


● HCl

L4 ANSWER 37 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1996:609954 CAPLUS
DOCUMENT NUMBER: 125:247623
TITLE: Preparation of 5-[(4-substituted)piperidin-1-yl]-3-arylpentanoic acid-derivative tachykinin receptor antagonists
INVENTOR(S): Bernstein, Peter Robert; Dembofsky, Bruce Thomas; Jacobs, Robert Toms
PATENT ASSIGNEE(S): Zeneca Limited, UK
SOURCE: PCT Int. Appl., 110 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9624582	A1	19960815	WO 1996-GB259	19960208
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN				
CA 2209832	A1	19960815	CA 1996-2209832	19960208
AU 9646297	A	19960827	AU 1996-46297	19960208
AU 714289	B2	19991223		
EP 808303	A1	19971126	EP 1996-901904	19960208
EP 808303	B1	20010620		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
CN 1181069	A	19980506	CN 1996-193228	19960208
JP 10513191	T	19981215	JP 1996-524072	19960208
AT 202342	T	20010715	AT 1996-901904	19960208
ES 2159717	T3	20011016	ES 1996-901904	19960208
PT 808303	T	20011130	PT 1996-901904	19960208
ZA 9601069	A	19960812	ZA 1996-1069	19960209
IN 1996DE00268	A	20050311	IN 1996-DE268	19960209
FI 9703283	A	19971007	FI 1997-3283	19970808
NO 9703652	A	19971008	NO 1997-3652	19970808
GR 3036639	T3	20011231	GR 2001-401497	20010918
PRIORITY APPLN. INFO.:			GB 1995-2644 A	19950210
			WO 1996-GB259 W	19960208

OTHER SOURCE(S): MARPAT 125:247623
GI

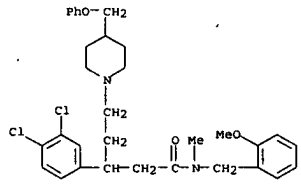


AB The title compds. (I; Q1-Q4 have the meanings given in the claims; * = an optionally asym. center) [e.g., N-benzyl-5-(4-hydroxy-4-phenylpiperidino)-

L4 ANSWER 37 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
3-(3,4-dichlorophenyl)pentamide; m.p. 64-67°] are nonpeptide antagonists of substance P and NKA (e.g., neurokinin NK1 and NK2 receptors), useful for the treatment of asthma (no data), etc. (no data), are prepd.

IT 181879-29-8P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of 5-[(4-substituted)piperidin-1-yl]-3-arylpentanoic acid-derivative tachykinin receptor antagonists)

RN 181879-29-8 CAPLUS
CN 1-Piperidinepentanamide, β-(3,4-dichlorophenyl)-N-[(2-methoxyphenyl)methyl]-N-methyl-4-(phenoxymethyl)- (CA INDEX NAME)



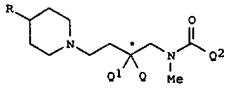
L4 ANSWER 38 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1995:346893 CAPLUS
DOCUMENT NUMBER: 122:132987
TITLE: Preparation of N-alkyl-substituted piperidines with neurokinin receptor antagonist activity.
INVENTOR(S): Jacobs, Robert Toms; Shenvi, Ashokkumar Bhikkappa
PATENT ASSIGNEE(S): Zeneca Ltd., UK
SOURCE: Eur. Pat. Appl., 27 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 625509	A1	19941123	EP 1994-303449	19940513
EP 625509	B1	19970730		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
CA 2123636	A1	19941118	CA 1994-2123636	19940516
US 5521199	A	19960528	US 1994-242949	19940516
JP 06340624	A	19941213	JP 1994-137780	19940517
JP 3394819	B2	20030407		

PRIORITY APPLN. INFO.: GB 1993-10066 A 19930517

OTHER SOURCE(S): MARPAT 122:132987
GI

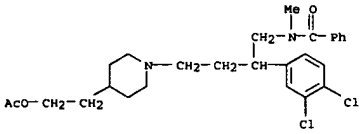


AB The title compds. [I; Q = (un)substituted Ph, (un)substituted thienyl, (un)substituted imidazolyl, (un)substituted naphthyl, etc.; Q1 = H, C1-3 alkyl; Q2 = (un)substituted aryl or heteroaryl; R = (un)substituted C1-8 alkyl or C3-6 cycloalkyl; * = an optional chiral center], useful as neurokinin 2 receptor antagonists, useful for the treatment of asthma (no data), are prepared and I-containing formulations presented. Thus, N-[2-(3,4-dichlorophenyl)-4-[4-(2-acetoxyethyl)piperidino]butyl]-N-methylbenzamide hydrochloride, m.p. 62-71°, was prepared from 4-(2-acetoxyethyl)piperidine and demonstrated Ki 40 nM to guinea pig-derived NKA receptors.

IT 160809-52-9P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of N-alkyl-substituted piperidines with neurokinin receptor antagonist activity)

RN 160809-52-9 CAPLUS
CN Benzamide, N-[4-[4-[2-(acetyloxy)ethyl]-1-piperidinyl]-2-(3,4-dichlorophenyl)butyl]-N-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 38 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



● HCl

L4 ANSWER 39 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:557655 CAPLUS
DOCUMENT NUMBER: 121:157655
TITLE: Piperidine derivative 5-HT4 receptor antagonists
INVENTOR(S): Gaster, Laramie Mary; Wyman, Paul Adrian
PATENT ASSIGNEE(S): SmithKline Beecham PLC, UK
SOURCE: PCT Int. Appl., 29 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9410174	A1	19940511	WO 1993-EP3054	19931102
W: AU, CA, JP, KR, NZ, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2148700	A1	19940511	CA 1993-2148700	19931102
AU 9454197	A	19940524	AU 1994-54197	19931102
AU 680453	B2	19970731		
EP 667867	A1	19950823	EP 1993-924569	19931102
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 08502741	T	19960326	JP 1993-510716	19931102
ZA 9308204	A	19940819	ZA 1993-8204	19931103
CN 1092422	A	19940921	CN 1993-112680	19931104
US 5705498	A	19980106	US 1995-433369	19950504

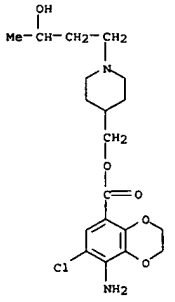
PRIORITY APPLN. INFO.: GB 1992-23155 A 19921105
GB 1993-9644 A 19930511
GB 1993-15202 A 19930722
WO 1993-EP3054 W 19931102

OTHER SOURCE(S): MARPAT 121:157655
AB The title compds. XCOYZ [X = (un)substituted monocyclic or polycyclic aromatic group; Y = O, NH; Z = (un)substituted N-containing (alkyl)heterocyclyl residue], useful as 5-HT4 receptor antagonists (no data) for the treatment or prophylaxis of gastrointestinal diorders (no data), cardiovascular diorders (no data), and CNS disorders (no data), are prepared Thus, 8-amino-7-chloro-1,4-benzodioxan-5-(4-piperidinylmethyl)carboxylate was condensed with 3-picolyl chloride and salified with oxalic acid; producing 5-[1-(3-pyridylmethyl)-4-piperidinyl]methyl-8-amino-7-chloro-1,4-benzodioxancarbonxylate oxalate, m.p. 219-221°.

IT 157330-76-2P 157330-78-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as 5-HT4 receptor antagonist)

RN 157330-76-2 CAPLUS
CN 1,4-Benzodioxin-5-carboxylic acid, 8-amino-7-chloro-2,3-dihydro-, [1-(3-hydroxybutyl)-4-piperidinyl]methyl ester (CA INDEX NAME)

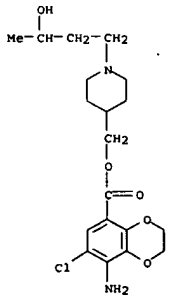
L4 ANSWER 39 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 157330-78-4 CAPLUS
CN 1,4-Benzodioxin-5-carboxylic acid, 8-amino-7-chloro-2,3-dihydro-, [1-(3-hydroxybutyl)-4-piperidinyl]methyl ester, ethanedioate (1:1) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 157330-76-2
CMF C19 H27 Cl N2 O5



CM 2

L4 ANSWER 39 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

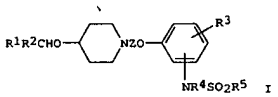
CRN 144-62-7
CMF C2 H2 O4

L4 ANSWER 40 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:217285 CAPLUS
DOCUMENT NUMBER: 120:217285
TITLE: Preparation of diarylmethoxypiperidine derivatives as antiallergy and antiischemia agents
INVENTOR(S): Murai, Satoshi; Shimano, Masanao; Yamamoto, Hiroshi; Koyama, Toshihiro; Nakamura, Tsutomu; Ogawa, Masaru; Watanuki, Mitsuru; Okamoto, Taira; Hori, Toshimitsu
PATENT ASSIGNEE(S): Kaken Pharmaceutical Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 61 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 529365	A1	19930303	EP 1992-113414	19920806
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
US 5190959	A	19930302	US 1992-925017	19920805
JP 05345759	A	19931227	JP 1992-211266	19920807
PRIORITY APPLN. INFO.:			JP 1991-199649	A 19910808
			JP 1992-96418	A 19920416

OTHER SOURCE(S): MARPAT 120:217285
GI

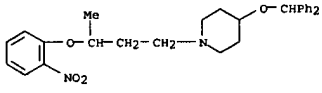


AB Title compds. I [R1, R2 = (substituted) Ph, C3-7 cycloalkyl, pyridyl, thienyl; R3 = H, halo, C1-4 alkyl, C1-4 alkoxy; R4 = H, C1-4 alkyl; R5 = (substituted) C1-5 alkyl, Ph, thienyl; Z = C1-6 alkylene, C2-6 alkenylene, C3-6 alkynylene] or a salt thereof useful as antiallergy and antiischemia agents, are prepared I have demonstrated inhibitory activity of anaphylactic histamine release and antihistaminic activity and effectiveness for prevention or treatment of ischemic heart disease. Ph2CHBr, 4-hydroxy-1-[3-(2-nitrophenoxy)propyl]piperidine and Et3N in Me2CHCH2COMe were refluxed to give the 4-diphenylmethoxy derivative which was reduced to the amino derivative to which in pyridine was added MeSO2Cl to give I [R1 = R2 = Ph, R3 = R4 = H, R5 = Me, Z = (CH2)3]. A capsule and tablet formation comprising I is given. Addnl. I were prepared

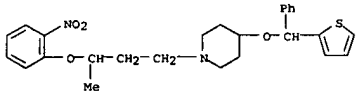
IT 148669-23-2P 148669-45-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in preparation of antiallergic and antiischemic agents)

L4 ANSWER 40 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 148669-23-2 CAPLUS
CN Piperidine, 4-(diphenylmethoxy)-1-[3-(2-nitrophenoxy)butyl]- (CA INDEX NAME)

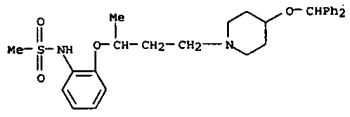


RN 148669-45-8 CAPLUS
CN Piperidine, 1-[3-(2-nitrophenoxy)butyl]-4-(phenyl-2-thienylmethoxy)- (CA INDEX NAME)

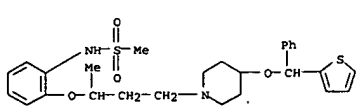


IT 148668-76-2P 148668-96-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as antiallergic and antiischemic agent)

RN 148668-76-2 CAPLUS
CN Methanesulfonamide, N-[2-[3-[4-(diphenylmethoxy)-1-piperidinyl]-1-methylpropoxy]phenyl]- (CA INDEX NAME)



RN 148668-96-6 CAPLUS
CN Methanesulfonamide, N-[2-[1-methyl-3-[4-(phenyl-2-thienylmethoxy)-1-piperidinyl]propoxy]phenyl]- (CA INDEX NAME)

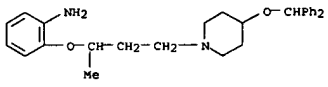


IT 148669-83-4 148670-12-6

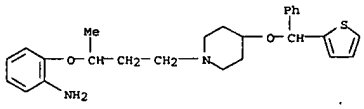
L4 ANSWER 40 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in prepn. of antiallergic and antiischemic agents)

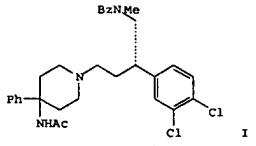
RN 148669-83-4 CAPLUS
CN Benzenamine, 2-[3-[4-(diphenylmethoxy)-1-piperidinyl]-1-methylpropoxy]- (CA INDEX NAME)



RN 148670-12-6 CAPLUS
CN Benzenamine, 2-[1-methyl-3-[4-(phenyl-2-thienylmethoxy)-1-piperidinyl]propoxy]- (CA INDEX NAME)

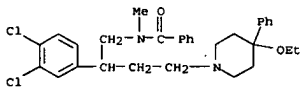


L4 ANSWER 41 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1993:573586 CAPLUS
DOCUMENT NUMBER: 119:173586
TITLE: Pharmacological profile and chemical synthesis of SR 48968, a non-peptide antagonist of the neurokinin A (NK2) receptor
AUTHOR(S): Emonds-Alt, Xavier; Proietto, Vicenzo; Van Broeck, Didier; Vilain, Pol; Advenier, Charles; Neliat, Gervais; Le Fur, Gerard; Brellere, Jean Claude
CORPORATE SOURCE: Sanofi Rech., Montpellier, F-34184, Fr.
SOURCE: Bioorganic & Medicinal Chemistry Letters (1993), 3(5), 925-30
CODEN: BMCLE8; ISSN: 0960-894X
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



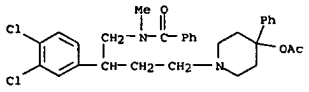
I

AB SR 48968 (I) is a potent, competitive and selective non-peptide antagonist of the neurokinin A (NK2) receptor. The synthesis of SR 48968 is described. The structure activity relationships for I analogs are shown using receptor binding and pharmacol. results.
IT 150062-60-5 150062-61-6 150062-66-1
RL: BIOL (Biological study)
(neurokinin NK2 receptor antagonist activity of, structure in relation to)
RN 150062-60-5 CAPLUS
CN Benzamide, N-[2-(3,4-dichlorophenyl)-4-(4-ethoxy-4-phenyl-1-piperidinyl)butyl]-N-methyl- (CA INDEX NAME)

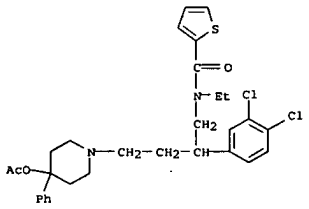


RN 150062-61-6 CAPLUS
CN Benzamide, N-[4-[4-(acetyloxy)-4-phenyl-1-piperidinyl]-2-(3,4-dichlorophenyl)butyl]-N-methyl- (CA INDEX NAME)

L4 ANSWER 41 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 150062-66-1 CAPLUS
CN 2-Thiophenecarboxamide, N-[4-[4-(acetyloxy)-4-phenyl-1-piperidinyl]-2-(3,4-dichlorophenyl)butyl]-N-ethyl- (CA INDEX NAME)

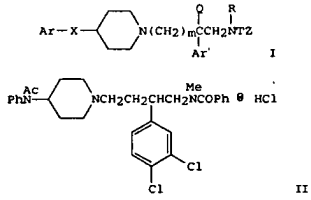


L4 ANSWER 42 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1993:408684 CAPLUS
DOCUMENT NUMBER: 119:8684
TITLE: Preparation of N-(aminoalkyl)piperidines, their enantiomers, and pharmaceutical compositions as neurokinin receptor antagonists
INVENTOR(S): Emonds-Alt, Xavier; Martinez, Serge; Proietto, Vincenzo; Van Broeck, Didier
PATENT ASSIGNEE(S): Elf Sanofi SA, Fr.
SOURCE: Eur. Pat. Appl., 47 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 515240	A1	19921125	EP 1992-401237	19920430
EP 515240	B1	19970924		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, PT, SE				
FR 2676054	A1	19921106	FR 1991-5486	19910503
FR 2676054	B1	19930903		
NO 9201733	A	19921104	NO 1992-1733	19920430
NO 178572	B	19960115		
NO 178572	C	19960424		
ZA 9203176	A	19930428	ZA 1992-3176	19920430
HU 65273	A2	19940502	HU 1992-1459	19920430
HU 213915	B	19971128		
RU 2089547	C1	19970910	RU 1992-5011510	19920430
AT 158574	T	19971015	AT 1992-401237	19920430
CZ 282919	B6	19971112	CZ 1992-1328	19920430
ES 2109987	T3	19980201	ES 1992-401237	19920430
FI 103041	B	19990415	FI 1992-1950	19920430
FI 103041	B1	19990415		
CA 2067924	A1	19921104	CA 1992-2067924	19920501
CA 2067924	C	20040330		
AU 9215918	A	19921105	AU 1992-15918	19920501
AU 657321	B2	19950309		
IL 101762	A	19961016	IL 1992-101762	19920501
BR 9201655	A	19921215	BR 1992-1655	19920504
US 5411971	A	19950502	US 1992-877734	19920504
JP 05140103	A	19930608	JP 1992-113818	19920506
JP 3108719	B2	20001113		
US 5606065	A	19970225	US 1995-410292	19950324
PRIORITY APPLN. INFO.:			FR 1991-5486 A	19910503
			US 1992-877734 A3	19920504

OTHER SOURCE(S): MARPAT 119:8684
GI

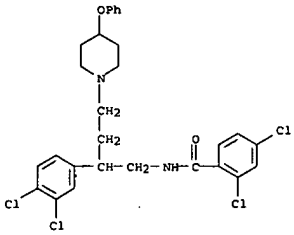
L4 ANSWER 42 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



I

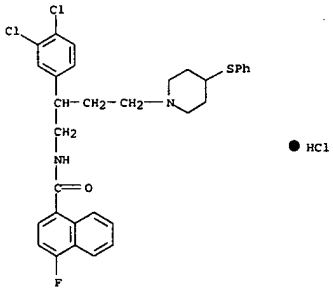
II

AB The preparation of title compds. I [m = 2, 3; Ar = (un)substituted Ph, thienyl, pyridyl, (un)substituted imidazolyl; Ar' = (un)substituted Ph, thienyl, (un)substituted imidazolyl or benzothienyl, (un)substituted naphthyl, biphenyl, (un)substituted indolyl; X = O, S, SO, SO2, NH, NCO-Alk, N-Alk (Alk = C1-3 alkyl), N-Alk1-NX1X2 (Alk1 = C1-3 alkylene; X1, X2 = H, C1-3 alkyl; NX1X2 = pyrrolidino, piperidino, morpholino); Q = H, C1-4 alkyl, specified aminoalkyls; R = H, Me, (CH2)nL (n = 2-6, L = H, amino, CO, C(S)NH, C(O)NH); T = CO, Z = M or OM; T = C(S)NH, C(O)NH, Z = M, where M = H, linear or branched C1-6 alkyl, α-hydroxybenzyl, α-alkylbenzyl, specified phenylalkyls, pyridylalkyls, naphthylalkyls, pyridylthioalkyls, styryl, specified imidazolylthioalkyls, 1-oxo-3-phenylindan-2-yl, mono- or polysubstituted aromatic or heteroarom.], their salts, isomers, and quaternary ammonium salts are claimed with preparative examples given. The compds. are of interest as neurokinin receptor antagonists. Title compound II antagonized neurokinin A with a Ki = 5.5 nM.
IT 147611-28-7P 147611-29-8P 147611-30-1P
147611-31-2P 147611-32-3P 147611-33-4P
147611-37-8P 147611-38-9P 147611-39-0P
147611-40-3P 147611-43-6P 147611-44-7P
147611-45-8P 147611-46-9P 147611-47-0P
147611-50-5P 147611-51-6P 147611-52-7P
147611-64-1P 147632-39-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as neurokinin receptor antagonist)
RN 147611-28-7 CAPLUS
CN Benzamide, 2,4-dichloro-N-[2-(3,4-dichlorophenyl)-4-(4-phenoxy-1-piperidinyl)butyl]-, monohydrochloride (9CI) (CA INDEX NAME)



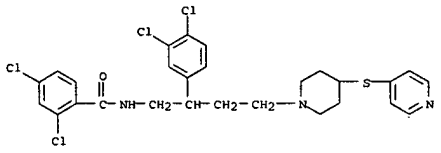
● HCl

RN 147611-29-8 CAPLUS
CN 1-Naphthalenecarboxamide, N-[2-(3,4-dichlorophenyl)-4-[4-(phenylthio)-1-piperidinyl]butyl]-4-fluoro-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

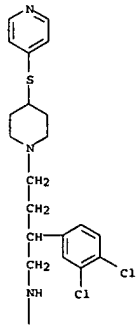
RN 147611-30-1 CAPLUS
CN Benzamide, 2,4-dichloro-N-[2-(3,4-dichlorophenyl)-4-[4-(phenylthio)-1-piperidinyl]butyl]-, monohydrochloride (9CI) (CA INDEX NAME)

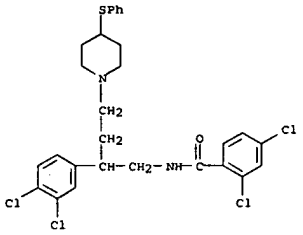


●2 HCl

RN 147611-33-4 CAPLUS
CN 1-Naphthalenecarboxamide, N-[2-(3,4-dichlorophenyl)-4-[4-(4-pyridinylthio)-1-piperidinyl]butyl]-4-fluoro-, dihydrochloride (9CI) (CA INDEX NAME)

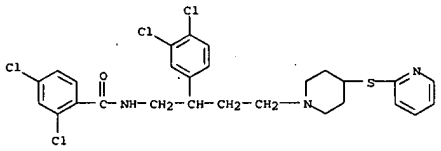
PAGE 1-A





● HCl

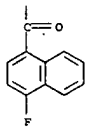
RN 147611-31-2 CAPLUS
CN Benzamide, 2,4-dichloro-N-[2-(3,4-dichlorophenyl)-4-[4-(2-pyridinylthio)-1-piperidinyl]butyl]-, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

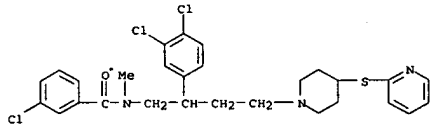
RN 147611-32-3 CAPLUS
CN Benzamide, 2,4-dichloro-N-[2-(3,4-dichlorophenyl)-4-[4-(4-pyridinylthio)-1-piperidinyl]butyl]-, dihydrochloride (9CI) (CA INDEX NAME)

PAGE 2-A



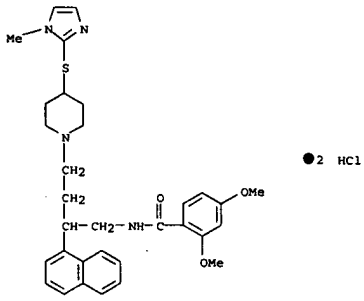
●2 HCl

RN 147611-37-8 CAPLUS
CN Benzamide, 3-chloro-N-[2-(3,4-dichlorophenyl)-4-[4-(2-pyridinylthio)-1-piperidinyl]butyl]-N-methyl-, dihydrochloride (9CI) (CA INDEX NAME)

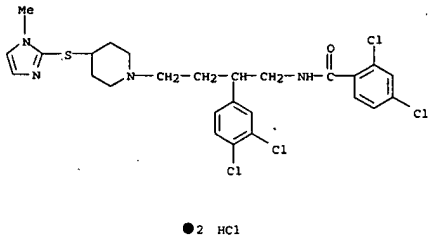


●2 HCl

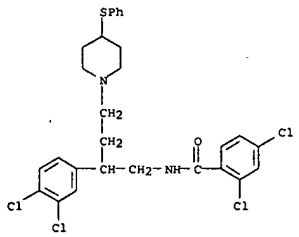
RN 147611-38-9 CAPLUS
CN Benzamide, 2,4-dimethoxy-N-[4-[4-[(1-methyl-1H-imidazol-2-yl)thio]-1-piperidinyl]-2-(1-naphthalenyl)butyl]-, dihydrochloride (9CI) (CA INDEX NAME)



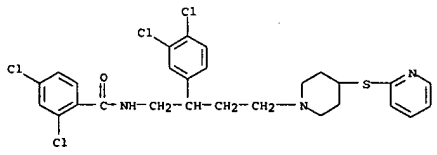
RN 147611-39-0 CAPLUS
CN Benzamide, 2,4-dichloro-N-[2-(3,4-dichlorophenyl)-4-[4-[(1-methyl-1H-imidazol-2-yl)thio]-1-piperidinyl]butyl]-, dihydrochloride (9CI) (CA INDEX NAME)



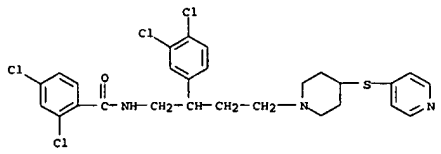
RN 147611-40-3 CAPLUS
CN 1-Naphthalenecarboxamide, N-[2-(3,4-dichlorophenyl)-4-[4-[(1-methyl-1H-imidazol-2-yl)thio]-1-piperidinyl]butyl]-4-fluoro-, dihydrochloride (9CI) (CA INDEX NAME)



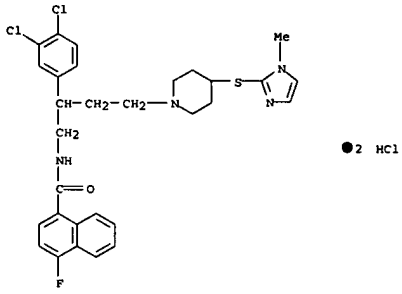
RN 147611-45-8 CAPLUS
CN Benzamide, 2,4-dichloro-N-[2-(3,4-dichlorophenyl)-4-[4-(2-pyridinylthio)-1-piperidinyl]butyl]- (CA INDEX NAME)



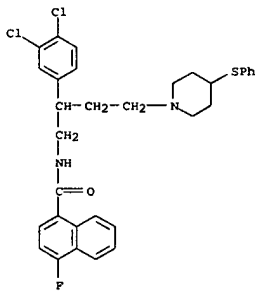
RN 147611-46-9 CAPLUS
CN Benzamide, 2,4-dichloro-N-[2-(3,4-dichlorophenyl)-4-[4-(4-pyridinylthio)-1-piperidinyl]butyl]- (CA INDEX NAME)



RN 147611-47-0 CAPLUS
CN 1-Naphthalenecarboxamide, N-[2-(3,4-dichlorophenyl)-4-[4-(4-pyridinylthio)-1-piperidinyl]butyl]-4-fluoro- (CA INDEX NAME)

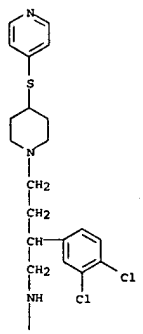


RN 147611-43-6 CAPLUS
CN 1-Naphthalenecarboxamide, N-[2-(3,4-dichlorophenyl)-4-[4-(phenylthio)-1-piperidinyl]butyl]-4-fluoro- (CA INDEX NAME)

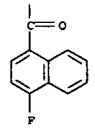


RN 147611-44-7 CAPLUS
CN Benzamide, 2,4-dichloro-N-[2-(3,4-dichlorophenyl)-4-[4-(phenylthio)-1-piperidinyl]butyl]- (CA INDEX NAME)

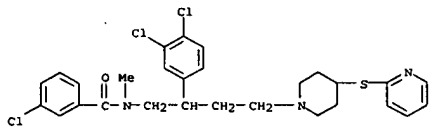
PAGE 1-A



PAGE 2-A

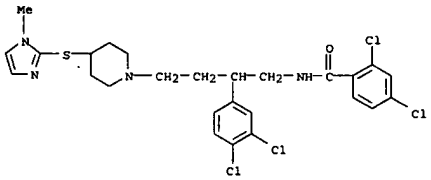


RN 147611-50-5 CAPLUS
CN Benzamide, 3-chloro-N-[2-(3,4-dichlorophenyl)-4-[4-(2-pyridinylthio)-1-piperidinyl]butyl]-N-methyl- (CA INDEX NAME)

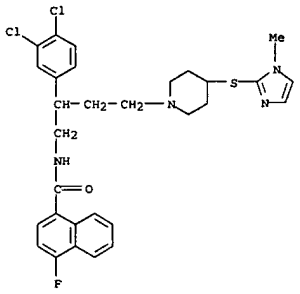


RN 147611-51-6 CAPLUS

L4 ANSWER 42 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
CN Benzamide, 2,4-dichloro-N-[2-(3,4-dichlorophenyl)-4-[4-[(1-methyl-1H-imidazol-2-yl)thio]-1-piperidinyl]butyl]- (CA INDEX NAME)

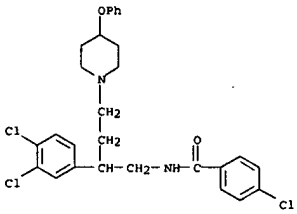


RN 147611-52-7 CAPLUS
CN 1-Naphthalenecarboxamide, N-[2-(3,4-dichlorophenyl)-4-[4-[(1-methyl-1H-imidazol-2-yl)thio]-1-piperidinyl]butyl]-4-fluoro- (CA INDEX NAME)

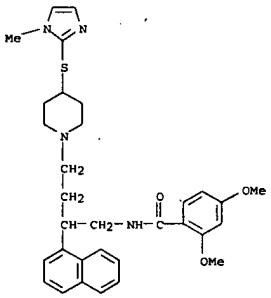


RN 147611-64-1 CAPLUS
CN Benzamide, 4-chloro-N-[2-(3,4-dichlorophenyl)-4-(4-phenoxy-1-piperidinyl)butyl]- (CA INDEX NAME)

L4 ANSWER 42 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 147632-39-1 CAPLUS
CN Benzamide, 2,4-dimethoxy-N-[4-[4-[(1-methyl-1H-imidazol-2-yl)thio]-1-piperidinyl]-2-(1-naphthalenyl)butyl]- (CA INDEX NAME)



L4 ANSWER 43 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1992:426590 CAPLUS
DOCUMENT NUMBER: 117:26590
TITLE: Piperidine- and piperazine-containing arylalkylamines, process for their preparation, and pharmaceutical compositions containing them as neurokinin receptor antagonists.
INVENTOR(S): Emonds-Alt, Xavier; Goulaouic, Pierre; Proietto, Vincenzo; Van Broeck, Didier
PATENT ASSIGNEE(S): Sanofi SA, Fr.
SOURCE: Eur. Pat. Appl., 54 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

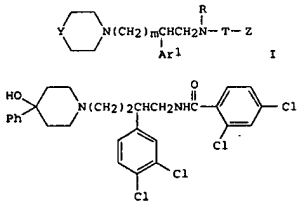
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 474561	A1	19920311	EP 1991-402382	19910905
EP 474561	B1	19981209		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
FR 2666335	A1	19920306	FR 1990-11039	19900905
FR 2666335	B1	19921211		
FR 2678267	A1	19921231	FR 1991-7824	19910625
FR 2678267	B1	19940204		
IL 99320	A	19950731	IL 1991-99320	19910827
AU 9183542	A	19920312	AU 1991-83542	19910903
AU 657272	B2	19950309		
BR 9103802	A	19920519	BR 1991-3802	19910903
CA 2050639	A1	19920306	CA 1991-2050639	19910904
CA 2050639	C	19971202		
FI 9104174	A	19920306	FI 1991-4174	19910904
FI 98457	B	19970314		
FI 98457	C	19970625		
NO 9103469	A	19920306	NO 1991-3469	19910904
NO 177226	B	19950502		
NO 177226	C	19950809		
HU 59098	A2	19920428	HU 1991-2863	19910904
HU 222351	B1	20030628		
ZA 9107017	A	19921230	ZA 1991-7017	19910904
PL 167994	B1	19951230	PL 1991-291618	19910904
RU 2070196	C1	19961210	RU 1991-5001435	19910904
JP 04261155	A	19920917	JP 1991-254730	19910905
US 5236921	A	19930817	US 1991-755454	19910905
AT 174332	T	19981215	AT 1991-402382	19910905
ES 2127722	T3	19990501	ES 1991-402382	19910905
CZ 285994	B6	19991215	CZ 1991-2724	19910905
LV 10606	B	19960420	LV 1993-139	19930225
LT 3442	B	19951025	LT 1993-585	19930531
US 5350852	A	19940927	US 1993-105677	19930813
HK 1005290	A1	20000818	HK 1998-104394	19980521

PRIORITY APPLN. INFO.:

FR 1990-11039	A	19900905
FR 1991-7824	A.	19910625
US 1991-755454	A3	19910905

OTHER SOURCE(S): MARPAT 117:26590
GI

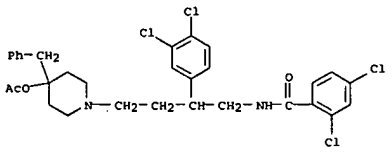
L4 ANSWER 43 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



I

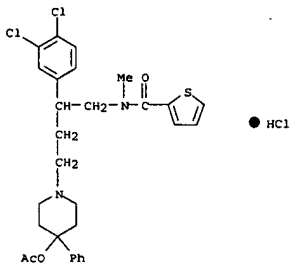
II

AB Title compds. I [Y = Cy-N, Ar(CH2)xC(X); Cy = (substituted) Ph, cycloalkyl, pyrimidinyl, pyridyl; Ar = (substituted) Ph, pyridyl, thienyl; x = 0, 1; X = OH, alkoxy, hydroxyalkyl, acyloxy, phenacyloxy, CO2H, carbalkoxy, cyano, aminoalkyl, (di)(alkyl)amino, alkanoylamino, acyl, etc.; m = 2, 3; Ar' = (substituted) Ph, (benzo)thienyl, naphthyl, (N-alkyl)indolyl; R = H, alkyl; T = CO, CONH, C(S)NH; Z = H, M, OM; M = alkyl, (substituted) phenylalkyl, pyridylalkyl, (substituted) naphthylalkyl, pyridylthioalkyl, styryl, etc.] were prepared for use as antiasthmatics and bronchodilators. For example, N-[2-(3,4-dichlorophenyl)-4-hydroxybutyl]-2,4-dichlorobenzamide (preparation given) was converted to the mesylate ester by MeSO2Cl, followed by amination with 4-hydroxy-4-phenylpiperidine, chromatog., and salification, to give title compound II as the HCl salt. I displaced [2-125I histidyl]-neurokinin A from NK-2 receptors of rat duodenal membranes with Ki = 0.50-3 nM, and antagonized NK-2 agonist-induced bronchospasm in guinea pigs.
IT 142001-26-1P 142001-27-2P 142001-28-3P
142001-38-5P 142001-41-0P 142001-42-1P
142001-43-2P 142001-44-3P 142001-51-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as neurokinin receptor antagonist)
RN 142001-26-1 CAPLUS
CN Benzamide, N-[4-[4-(acetyloxy)-4-(phenylmethyl)-1-piperidinyl]-2-(3,4-dichlorophenyl)butyl]-2,4-dichloro-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

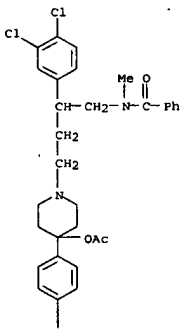
RN 142001-27-2 CAPLUS
CN 2-Thiophenecarboxamide, N-[4-[4-(acetyloxy)-4-phenyl-1-piperidinyl]-2-(3,4-dichlorophenyl)butyl]-N-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 142001-28-3 CAPLUS
CN 2-Thiophenecarboxamide, N-[4-[4-(acetyloxy)-4-(4-chlorophenyl)-1-piperidinyl]-2-(3,4-dichlorophenyl)butyl]-N-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

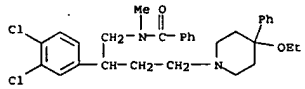
PAGE 1-A



PAGE 2-A

● HCl

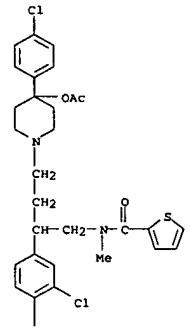
RN 142001-41-0 CAPLUS
CN Benzamide, N-[2-(3,4-dichlorophenyl)-4-(4-ethoxy-4-phenyl-1-piperidinyl)butyl]-N-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 142001-42-1 CAPLUS
CN Benzamide, N-[4-[4-(acetyloxy)-4-phenyl-1-piperidinyl]-2-(3,4-dichlorophenyl)butyl]-N-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

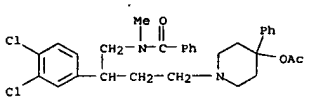
PAGE 1-A



PAGE 2-A

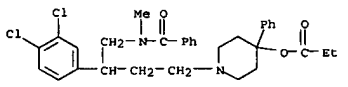
● HCl

RN 142001-38-5 CAPLUS
CN Benzamide, N-[4-[4-(acetyloxy)-4-(4-chlorophenyl)-1-piperidinyl]-2-(3,4-dichlorophenyl)butyl]-N-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



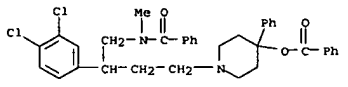
● HCl

RN 142001-43-2 CAPLUS
CN Benzamide, N-[2-(3,4-dichlorophenyl)-4-[4-(1-oxopropoxy)-4-phenyl-1-piperidinyl]butyl]-N-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

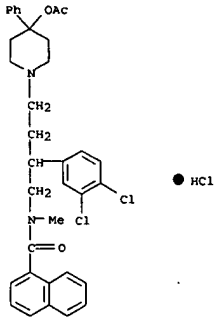
RN 142001-44-3 CAPLUS
CN Benzamide, N-[4-[4-(benzoyloxy)-4-phenyl-1-piperidinyl]-2-(3,4-dichlorophenyl)butyl]-N-methyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 142001-51-2 CAPLUS
CN 1-Naphthalenecarboxamide, N-[4-[4-(acetyloxy)-4-phenyl-1-piperidinyl]-2-(3,4-dichlorophenyl)butyl]-N-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 43 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



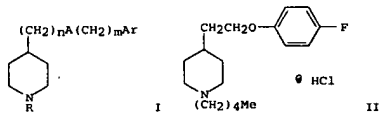
L4 ANSWER 44 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1992:235452 CAPLUS
DOCUMENT NUMBER: 116:235452
TITLE: Preparation of 4-(aryloxyalkyl)piperidines as cerebral calcium blockers
INVENTOR(S): Brown, Thomas Henry; Cooper, David Gwynn
PATENT ASSIGNEE(S): Smith Kline and French Laboratories Ltd., UK
SOURCE: PCT Int. Appl., 72 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9202502	A1	19920220	WO 1991-GB1340	19910805
W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KP, KR, LK, MC, MG, MW, NO, PL, RO, SD, SU, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
ZA 9106095	A	19930331	ZA 1991-6095	19910802
AU 9183271	A	19920302	AU 1991-83271	19910805
CN 1061963	A	19920617	CN 1991-105945	19910805
EP 542846	A1	19930526	EP 1991-914558	19910805
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 06500093	T	19940106	JP 1991-513952	19910805

PRIORITY APPLN. INFO.: GB 1990-17224 A 19900806
GB 1991-7757 A 19910412
WO 1991-GB1340 A 19910805

OTHER SOURCE(S): MARPAT 116:235452
GI



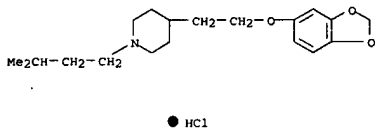
AB Title compds. [I; R = (di)(phenyl)alkyl, (di)(phenyl)alkenyl, (di)(phenyl)alkynyl, cycloalkyl(alkyl); A = bond, O, S, NR1; R1 = H, alkyl, phenylalkyl; Ar = (substituted) (hetero)aryl; m = 0-3; n = 0-6], were prepared Thus, 4-(2-hydroxyethyl)-1-pentylpiperidine (preparation given), 4-FC6H4OH, Ph3P, and di-Et azodicarboxylate were stirred 18 h in THF at room temperature to give title compound II. I at 20 μM gave 30-100% inhibition of plateau Ca2+ current in dorsal root ganglion neurons.

IT 141430-03-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as cerebral calcium blocker)

RN 141430-03-7 CAPLUS

L4 ANSWER 44 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

CN Piperidine, 4-[2-(1,3-benzodioxol-5-yloxy)ethyl]-1-(3-methylbutyl)-, hydrochloride (9CI) (CA INDEX NAME)



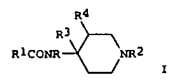
L4 ANSWER 45 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:186308 CAPLUS
DOCUMENT NUMBER: 104:186308
ORIGINAL REFERENCE NO.: 104:29497a,29500a
TITLE: N-Aryl-N-(4-piperidinyl)amides and pharmaceutical compositions and methods employing these compounds
INVENTOR(S): Huang, Bao Shan; Deutsche, Kirsten Hansen; Lalinde, Nhora Lucia; Terrell, Ross Clark; Kudzma, Linas Vladas
PATENT ASSIGNEE(S): BOC Inc., USA
SOURCE: Eur. Pat. Appl., 71 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 160422	A1	19851106	EP 1985-302401	19850404
EP 160422	B1	19920108		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
US 4584303	A	19860422	US 1985-707433	19850301
AU 8540393	A	19860116	AU 1985-40393	19850326
AU 575924	B2	19880811		
IL 74726	A	19890815	IL 1985-74726	19850326
ZA 8502315	A	19851127	ZA 1985-2315	19850327
DK 8501540	A	19851010	DK 1985-1540	19850403
FI 8501337	A	19851010	FI 1985-1337	19850403
NO 8501393	A	19851010	NO 1985-1393	19850403
CA 1281719	C	19910319	CA 1985-478273	19850403
AT 71369	T	19920115	AT 1985-302401	19850404
ES 542023	A1	19860901	ES 1985-542023	19850408
JP 60248670	A	19851209	JP 1985-75231	19850409
ES 552468	A1	19870501	ES 1986-552468	19860227

PRIORITY APPLN. INFO.: US 1984-598769 A 19840409
US 1985-707433 A 19850301
EP 1985-302401 A 19850404

OTHER SOURCE(S): CASREACT 104:186308; MARPAT 104:186308
GI



AB The title compds. I (R = (un)substituted Ph; R1 = furanyl, thienyl, R5OC(R6)2, R5 = alkyl, cycloalkyl, Ph, phenylalkyl; R6 = H, alkyl, cycloalkyl; R2 = alkyl, alkenyl, phenylalkyl, thiazolylalkyl, etc.; R3 = H, MeOCH2, carboxylate; R4 = H, Me) and their salts, useful as analgesics, were prepared A mixture of 1-(2-phenylethyl)-4-piperidone, PhNH2, toluenesulfonic acid, and PhMe was refluxed with H2O removal to give 1-(2-phenylethyl)-4-(phenylimino)piperidine which was reduced with NaBH4

L4 ANSWER 45 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
to give 1-(2-phenylethyl)-4-(phenylamino)piperidine. This was reacted with MeOCH2COCl to give 1-(2-phenylethyl)-4-[N-(phenylmethoxy)acetamido]piperidine-HCl (II). In tests on mice for analgesic activity the ED50 for II was 0.08 mg/kg i.v.

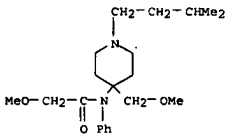
IT 101344-27-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of, as analgesic)

RN 101344-27-8 CAPLUS

CN Acetamide, 2-methoxy-N-[4-(methoxymethyl)-1-(3-methylbutyl)-4-piperidinyl]-N-phenyl-, ethanedioate (9CI) (CA INDEX NAME)

CM 1

CRN 101344-26-7
CMF C21 H34 N2 O3



CM 2

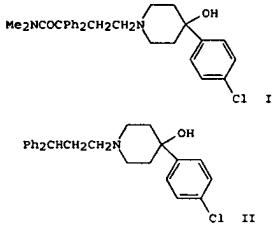
CRN 144-62-7
CMF C2 H2 O4

L4 ANSWER 46 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1982:406163 CAPLUS
DOCUMENT NUMBER: 97:6163
ORIGINAL REFERENCE NO.: 97:1191a,1194a
TITLE: Preparation of loperamide
PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57042671	A	19820310	JP 1980-114597	19800820
JP 63045382	B	19880909		
PRIORITY APPLN. INFO.:			JP 1980-114597	19800820

GI



I

II

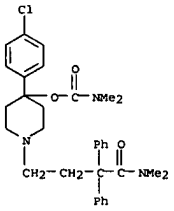
AB Loperamide (I) and its salts were prepared Thus, stirring II with Me2NCOCl in benzene/Et3N in the presence of 50% NaH followed by hydrolysis with 2 N HCl and treatment with HCl/Me2CHOH gave loperamide-HCl.

IT 82103-73-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrolysis of)

RN 82103-73-9 CAPLUS

CN Carbamic acid, dimethyl-, 4-(4-chlorophenyl)-1-[4-(dimethylamino)-4-oxo-3,3-diphenylbutyl]-4-piperidinyl ester (9CI) (CA INDEX NAME)

L4 ANSWER 46 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



L4 ANSWER 47 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

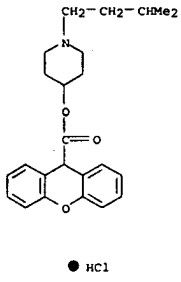
ACCESSION NUMBER: 1981:568943 CAPLUS
DOCUMENT NUMBER: 95:168943
ORIGINAL REFERENCE NO.: 95:28233a,28236a
TITLE: Chemistry of 1,3-bifunctional compounds. XXV. Synthesis of some esters containing substituted piperidine and tetrahydropyridine skeletons
AUTHOR(S): Felfoldi, K.; Molnar, A.; Bartok, M.; Karakhanov, R. A.
CORPORATE SOURCE: Dep. Org. Chem., Attila Jozsef Univ., Szeged, 6720, Hung.
SOURCE: Acta Physica et Chemica (1980), 26(3-4), 177-84
CODEN: AUSHAF; ISSN: 0001-6721
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 95:168943

AB Fifty-five title compds. were synthesized from N-substituted-4-piperidinols and various 4-substituted-piperidinyl and tetrahydropipidinylpropanols. N-(3-Methylbutyl)-4-piperidinylxanthene-9-carboxylate had coronary vasodilator activity.

IT 67971-71-5P 79509-00-5P 79509-01-6P
79509-02-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 67971-71-5 CAPLUS

CN 9H-Xanthene-9-carboxylic acid, 1-(3-methylbutyl)-4-piperidinyl ester, hydrochloride (9CI) (CA INDEX NAME)

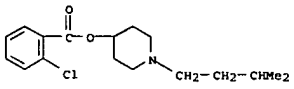


● HCl

RN 79509-00-5 CAPLUS

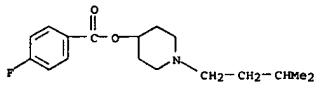
CN Benzoic acid, 2-chloro-, 1-(3-methylbutyl)-4-piperidinyl ester, hydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 47 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



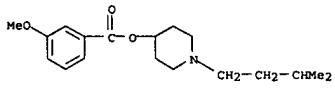
● HCl

RN 79509-01-6 CAPLUS
CN Benzoic acid, 4-fluoro-, 1-(3-methylbutyl)-4-piperidinyl ester, hydrochloride (9CI) (CA INDEX NAME)



● HCl

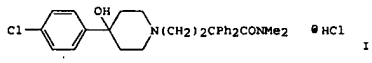
RN 79509-02-7 CAPLUS
CN Benzoic acid, 3-methoxy-, 1-(3-methylbutyl)-4-piperidinyl ester, hydrochloride (9CI) (CA INDEX NAME)



● HCl

L4 ANSWER 48 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1980:436719 CAPLUS
DN 93:36719
OR 93:5889a,5892a
TI Disposition and metabolism of [14C]loperamide in rats
AU Miyazaki, Hisashi; Nambu, Keiko; Matsunaga, Yoshimasa; Hashimoto, Masahisa
CS Res. Lab., Dainippon Pharm. Co., Ltd., Osaka, Japan
SO European Journal of Drug Metabolism and Pharmacokinetics (1979), 4(4), 199-206
CODEN: EJDPD2; ISSN: 0398-7639
DT Journal
LA English
GI



I

AB Following oral administration of 14C-labeled loperamide-HCl (I) [34552-83-5] (1 mg/kg) to rats, plasma levels of radioactivity reached a maximum at 4 h and decreased with a half-life of 4.1 h. Radioactivity in 96 h feces accounted for 95% of the dose, with 30% associated with unchanged I, whereas that in urine accounted for only 3.5%. Radioactivity in 48 h bile accounted for 42% of the dose, associated entirely with metabolites. Three percent of the dose was found at the level of the enterohepatic cycles. Thus .apprx.70% of the dose was absorbed by the intestine, the target tissue of the drug, a portion (30%) of which was excreted back into the intestinal cavity after demethylation, whereas the remaining 40% was transferred to the liver, extensively metabolized and excreted into the bile.

IT 74108-67-1 74108-68-2 74109-61-8
74109-62-9
RL: FORM (Formation, nonpreparative)
(formation of, from loperamide)

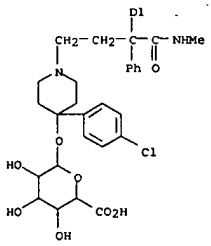
RN 74108-67-1 CAPLUS
CN β-D-Glucopyranosiduronic acid, 4-(4-chlorophenyl)-1-[3-(hydroxyphenyl)-4-(methylamino)-4-oxo-3-phenylbutyl]-4-piperidinyl (9CI) (CA INDEX NAME)

PAGE 1-A

D1—OH

L4 ANSWER 48 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 2-A



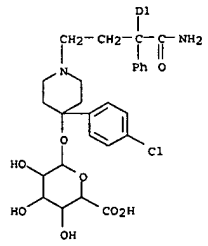
RN 74108-68-2 CAPLUS
CN β-D-Glucopyranosiduronic acid, 1-[4-amino-3-(hydroxyphenyl)-4-oxo-3-phenylbutyl]-4-(4-chlorophenyl)-4-piperidinyl (9CI) (CA INDEX NAME)

PAGE 1-A

D1—OH

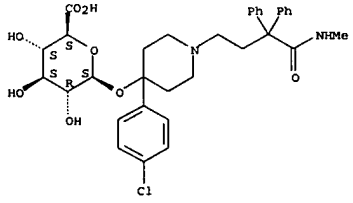
L4 ANSWER 48 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

PAGE 2-A



RN 74109-61-8 CAPLUS
CN β-D-Glucopyranosiduronic acid, 4-(4-chlorophenyl)-1-[4-(methylamino)-4-oxo-3,3-diphenylbutyl]-4-piperidinyl (9CI) (CA INDEX NAME)

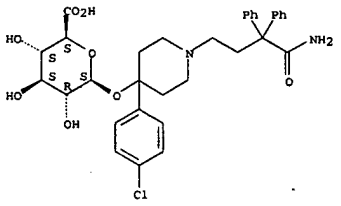
Absolute stereochemistry.



RN 74109-62-9 CAPLUS
CN β-D-Glucopyranosiduronic acid, 1-(4-amino-4-oxo-3,3-diphenylbutyl)-4-(4-chlorophenyl)-4-piperidinyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L4 ANSWER 48 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

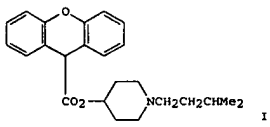


L4 ANSWER 49 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1978:563414 CAPLUS
DOCUMENT NUMBER: 89:163414
ORIGINAL REFERENCE NO.: 89:25321a,25324a
TITLE: Xanthene-9-carboxylic acid derivative with coronary dilating effect
INVENTOR(S): Felfoldi, Karoly; Bartok, Mihaly; Molnar, Arpad; Karpati, Egon; Szporny, Laszlo
PATENT ASSIGNEE(S): Richter, Gedeon, Vegyeszeti Gyar Rt., Hung.
SOURCE: Belg., 12 pp.
CODEN: BEXXAL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 860906	A1	19780316	BE 1977-182680	19771117
HU 173268	B	19790328	HU 1976-RI601	19761123
JP 53066439	A	19780613	JP 1977-136534	19771114
NL 7712611	A	19780525	NL 1977-12611	19771116
GB 1580168	A	19801126	GB 1977-47971	19771117
PRIORITY APPLN. INFO.:			HU 1976-RI601 A	19761123

GI



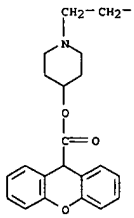
I

AB Ester I and salts were prepared for use as coronary vasodilators by treating 9-xanthenecarboxylic acid or its derivs. with 1-isopentyl-4-piperidinol (II). II was prepared by alkylating 4-piperidinol. I was obtained in 52.6% yield by treating 9-xanthenecarbonyl chloride with II. I had superior activity to dipyridamole in Langendorff preparation

IT 67817-55-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and coronary vasodilator activity of)

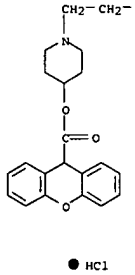
RN 67817-55-4 CAPLUS
CN 9H-Xanthene-9-carboxylic acid, 1-(3-methylbutyl)-4-piperidinyl ester (CA INDEX NAME)

L4 ANSWER 49 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



IT 67971-71-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 67971-71-5 CAPLUS
CN 9H-Xanthene-9-carboxylic acid, 1-(3-methylbutyl)-4-piperidinyl ester, hydrochloride (9CI) (CA INDEX NAME)



● HCl

L4 ANSWER 50 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1976:43872 CAPLUS
DOCUMENT NUMBER: 84:43872
ORIGINAL REFERENCE NO.: 84:7197a,7200a
TITLE: Substituted piperidinium chlorides
INVENTOR(S): Hydro, William R.
PATENT ASSIGNEE(S): United States Dept. of the Army, USA
SOURCE: U.S., 5 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

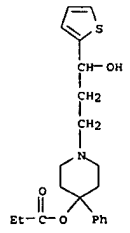
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3919243	A	19751111	US 1967-687392	19671201
PRIORITY APPLN. INFO.:			US 1967-687392 A	19671201

GI For diagram(s), see printed CA Issue.

AB The title compds. I.HCl (X = O, S; Z = CHOH, CO), potent incapacitating chemical agents for weapons systems, were prepared from 2-acetylfuran (II) and 2-acetylthiophene (III), resp. Thus, II and III underwent Mannich reaction with Me2NH and subsequent quaternization and substitution reaction with 4-phenyl-4-piperidinol to give IV. Acylation of IV by EtCOCl and NaBH4 reduction gave I (Z = CHOH).

IT 57975-76-5P 57975-80-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

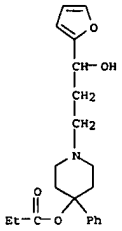
RN 57975-76-5 CAPLUS
CN 4-Piperidinol, 1-[3-hydroxy-3-(2-thienyl)propyl]-4-phenyl-, 4-propanoate, hydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 57975-80-1 CAPLUS
CN 4-Piperidinol, 1-[3-(2-furanyl)-3-hydroxypropyl]-4-phenyl-, 4-propanoate, hydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 50 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



● HCl

L4 ANSWER 51 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1973:515450 CAPLUS
DOCUMENT NUMBER: 79:115450
ORIGINAL REFERENCE NO.: 79:18747a,18750a
TITLE: Cyano-3-diphenyl-3,3-propyl-1-pyridine
INVENTOR(S): Carron, Claude L. C.; Jullien, Alexandra F.; Manoury, Philippe M.
PATENT ASSIGNEE(S): Synthelabo S. A.
SOURCE: Fr. Demande, 15 pp.
CODEN: FRXXBL
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FR 2158108	A1	19730615	FR 1971-39376	19711103
FR 2158108	B1	19750207		

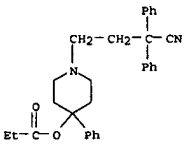
PRIORITY APPLN. INFO.: FR 1971-39376 A 19711103

GI For diagram(s), see printed CA Issue.

AB Phenylpiperidinobutyronitriles I (R = H, 4-OMe, 3-CF3, R1 = OH, O2CEt, R = H, R1 = H, OAc, OCO2Et) and their salts were prepared Thus, BrCH2CH2CPh2CN was treated with 4-phenylpiperidine to give 84% I-HCl (R = R1 = H). I were more effective as analgesics than aminopyrine, equal to diphenoxylate spasmolytics, and much more effective than codeine sulfate antitussives. Their i.p. LD50 in mice was 90- > 1600 mg/kg.

IT 50311-11-0P 50311-12-1P 50311-13-2P 50311-14-3P 50311-15-4P 50311-16-5P 50311-17-6P 50329-89-0P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

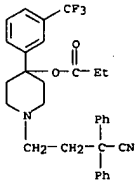
RN 50311-11-0 CAPLUS
CN 1-Piperidinebutanenitrile, 4-(1-oxopropoxy)-α,α,4-triphenyl-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 50311-12-1 CAPLUS
CN 1-Piperidinebutanenitrile, 4-(1-oxopropoxy)-α,α-diphenyl-4-[3-(trifluoromethyl)phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 51 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

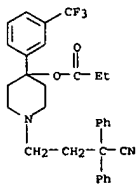


● HCl

RN 50311-13-2 CAPLUS
CN 1-Piperidinebutanenitrile, 4-(1-oxopropoxy)-α,α-diphenyl-4-[3-(trifluoromethyl)phenyl]-, ethanedioate (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 50329-89-0
CMF C31 H31 F3 N2 O2



CM 2

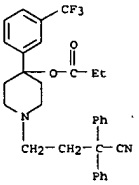
CRN 144-62-7
CMF C2 H2 O4

RN 50311-14-3 CAPLUS
CN Benzeneacetic acid, α-hydroxy-α-phenyl-, compd. with 4-(1-oxopropoxy)-α,α-diphenyl-4-[3-(trifluoromethyl)phenyl]-1-

L4 ANSWER 51 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
piperidinebutanenitrile (9CI) (CA INDEX NAME)

CM 1

CRN 50329-89-0
CMF C31 H31 F3 N2 O2



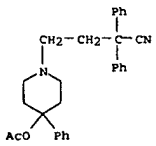
CM 2

CRN 76-93-7
CMF C14 H12 O3

RN 50311-15-4 CAPLUS
CN Butanedioic acid, compd. with 4-(acetyloxy)-α,α,4-triphenyl-1-piperidinebutanenitrile (9CI) (CA INDEX NAME)

CM 1

CRN 50575-80-9
CMF C29 H30 N2 O2



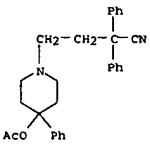
L4 ANSWER 51 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
CM 2

CRN 110-15-6
CMF C4 H6 O4

RN 50311-16-5 CAPLUS
CN 1-Piperidinebutanenitrile, 4-(acetyloxy)-α,α,4-triphenyl-, (2R,3R)-2,3-dihydroxybutanedioate (9CI) (CA INDEX NAME)

CM 1

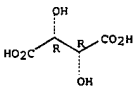
CRN 50575-80-9
CMF C29 H30 N2 O2



CM 2

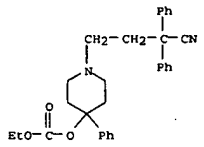
CRN 87-69-4
CMF C4 H6 O6

Absolute stereochemistry.



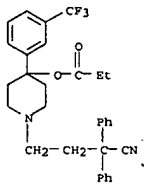
RN 50311-17-6 CAPLUS
CN Carbonic acid, 1-(3-cyano-3,3-diphenylpropyl)-4-phenyl-4-piperidinyl ethyl
ester, monohydrochloride (9CI) (CA INDEX NAME)

L4 ANSWER 51 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



● HCl

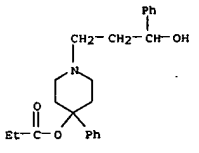
RN 50329-89-0 CAPLUS
CN 1-Piperidinebutanenitrile, 4-(1-oxopropoxy)-α,α-diphenyl-4-[3-(trifluoromethyl)phenyl]- (CA INDEX NAME)



L4 ANSWER 52 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1967:432601 CAPLUS
DOCUMENT NUMBER: 67:32601
ORIGINAL REFERENCE NO.: 67:6163a,6166a
TITLE: 1-(3-Hydroxy-3-phenylpropyl)-4-phenyl-4-propionoxypiperidine
INVENTOR(S): Carabateas, Philip M.
PATENT ASSIGNEE(S): Sterling Drug Inc.
SOURCE: U.S., 2 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3294804		19661227	US 1961-85195	19610127

AB The title compound hydrochloride (I) in aqueous solution administered to rats subcutaneously using the D'Amour-Smith method is about 3,220 times as potent an analgesic as meperidine hydrochloride on a molar basis. To a solution of 8.5 g. 1-(3-oxo-3-phenylpropyl)-4-phenyl-4-propionoxypiperidine in 100 cc. MeOH was added 1 g. NaBH4 and the solution stirred 2 hrs. The mixture was concentrated to a semi solid, poured into H2O and extracted with Et2O. The extract was washed with H2O, the Et2O distilled off, and the remaining oil dried by distillation with benzene. The oil was dissolved in Et2O, an HCl Et2O solution added and the precipitate boiled with AcOEt to give a solid. The solid was recrystd. once from EtCN and once from AcMe to give 36.1% I, m. 174.0-5.4°.
IT 16598-97-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 16598-97-3 CAPLUS
CN 1-Piperidinepropanol, 4-hydroxy-α,4-diphenyl-, 4-propionate, hydrochloride (8CI) (CA INDEX NAME)



● HCl

L4 ANSWER 53 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1963:415528 CAPLUS
DOCUMENT NUMBER: 59:15528
ORIGINAL REFERENCE NO.: 59:2778c-h,2779a-b
TITLE: 1-Aryl-ω-(4-alkoxy-4-arylpiperidino) derivatives of 1-alkanols and 1-alkanones
INVENTOR(S): Janssen, P. A. J.
PATENT ASSIGNEE(S): N.V. Research Laboratorium, Dr. C. Janssen
SOURCE: 31 pp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 615410		19620921	BE	
FR 1318141			FR	
FR 1318142			FR	
FR 1325116			FR	
FR M1796			FR	
FR M1797			FR	
FR M1798			FR	
FR M1799			FR	
GB 974711			GB	
US 3080372		19630305	US 1961-97425	19610322
PRIORITY APPLN. INFO.:			US	19610322

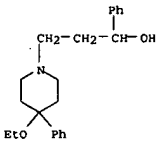
OTHER SOURCE(S): MARPAT 59:15528
GI For diagram(s), see printed CA Issue.
AB The title compds. are useful as antispasmodic agents. The alkanones are prepared by heating acetophenone, HCHO, and a 4-alkoxy-4-phenylpiperidine-HCl, or a 1-aryl-ω-haloalkanone with a 4-alkoxy-4-arylpiperidine. The alkanols are prepared according to the last method or by reduction of the alkanones with NaBH4. 4-Methoxy-4-phenylpiperidine-HCl (Ia.HCl) is prepared as follows. The temperature of a stirred mixture of 856 parts (by weight) NH4Cl and 3000 36% HCHO is held at 60° by cooling as 944 α-methylstyrene is slowly added, the mixture cooled to 40°, 2000 MeOH added, the mixture stirred 20 min., MeOH removed in vacuo, 2500 concentrated HCl added, the stirred mixture kept 4 hrs. at 100°, cooled, diluted with 2000 H2O, made alkaline(NaOH), extracted (C6H6), and the extract dried and distilled to give 4-phenyl-1,2,3,6-tetrahydropyridine (I), b1 97-112° (HCl salt m. 199-202°). Through a stirred solution of 160 parts I in 500 AcOH, dry HBr is passed during 7 hrs., the mixture kept 16 hrs., AcOH and HBr evaporated in vacuo (bath temperature <40°), and a suspension of the residue in Et2O is filtered to yield 4-phenyl-4-bromopiperidine-HBr, m. 209.5-10.5° (Me2CO-iso-PrOH). The salt (160 parts) in 3000 H2O is treated with 100 20% NaOH, the precipitate filtered off, washed with H2O, dissolved in 1500 parts boiling PhMe, and the solution dried and cooled to 0° to give 4-phenyl-piperidin-4-ol, m. 159-60°. A solution of this alc. and p-MeC6H4 SO2Cl in 4-methyl-2-pentanone (II) is refluxed 16 hrs. and worked up to give 1-(4-tosyl)-4-phenylpiperidin-4-ol (III), m. 183-4° (CHCl3). III treated with NaNH2 and MeI in PhMe gives

L4 ANSWER 53 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

1-(4-tosyl)-4-methoxy-4-phenylpiperidine (IV), m. 129-30°. Addn. of Na to a refluxing soln. of IV in BuOH, decompn. with H2O, and treatment of the resulting oil in (iso-Pr)2O with HCl gives Ia.HCl, m. 212-15°. A mixt. of 2.68 parts 4-methyl-acetophenone, 0.6 paraformaldehyde (V), 3.8 I, and a few drops HCl in 32 iso-PrOH is refluxed 1 hr., cooled, 0.6 parts V added, the whole refluxed 3 hrs., and dild. with 240 Me2CO to yield 1-[β-(4-methylbenzoyl)ethyl]-4-methoxy-4-phenylpiperidine-HCl, m. 202.5-3.4° (iso-PrOH). An alk. soln. of 6.83 parts Ia.HCl is extd. with C6H6-Et2O and the ext. concd. to give an oil which is dissolved in 120 II, 9.5 Na2CO3, 0.1 KI, and 7.64 γ-chloro-butyrophenone are added, the mixt. is stirred and refluxed 60 hrs., filtered, the ppt. washed with II, the filtrates treated with active C, and concd., and a soln. of the residual oil in (iso-Pr)2O treated with HCl to give 1-(γ-benzoylpropyl)-4-methoxy-4-phenylpiperidine-HCl, m. 205-6° (iso-PrOH, butanone). Styrene oxide (3 parts) and 4.5 I is heated at 100° 20 hrs., cooled, and filtered to give 1-phenyl-2-(4-methoxy-4-phenylpiperidino)-ethanol, m. 114.2-15.8° [iso-PrOH-(isoPr)2O]. A mixt. of 5.5 parts 1-[β-(2-thenoyl)ethyl]-4-methoxy-4-phenylpiperidine (from the HCl salt), 0.48 NaBH4, and 160 EtOH is stirred 15 hrs. at room temp., decompd. with 35 5N HCl, made alk. with NaOH, extd. with CHCl3, the org. layer dried (K2CO3) and concd., and the oil treated with HCl in 400 (iso-Pr)2O to give 1-(2-thienyl)-3-(4-methoxy-4-phenylpiperidino)-1-propanol-HCl, m. 202-3° (EtOAc-iso-PrOH). The following alkanones (HCl salts) are prepd.: VI (R' = H, X = CO) (Ar, n, R, and m.p. given): Ph, 2, Me, 199-202° (Me2CO-iso-PrOH 1:1);- Ph, 2, Et, 179-81°, 4-FC6H4, 2, Me, 218-19° (Me2CO-iso-PrOH); 4-MeOC6H4, 2, Me, 192-5°; 2-C4H3S (thienyl), 2, Me, 199-203.5°; 2-C4H3S, 2, Et, 181-2°; Ph, 3, Et, 167-8.5° (Me2CO); Ph, 3, Pr, 169-72° (EtOAc); 4-FC6H4, 3, Me, 226-7.5° (free base m. 75.8-6.8°); 4-FC6H4, 3, Me (R' = Me), - (free base m. 81-2°); 4-FC6H4, 3, Et, 171.2-3.0° (EtOAc) (free base m. 63.2-3.8°); 4-FC6H4, 3, Pr, 178.5-80° (Me2CO); 4-FC6H4, 3, Bu, 147.6-9.0° (oxalate) (iso-PrOH); 2-C4H3S, 3, Me, 234.5-5.0°; Ph, 4, Me, 185-7° (Me2CO); Ph, 4, Et, 150-2° (Me2CO-iso-PrOH); Ph, 4, Pr, - [oxalate m. 184-7° (iso-PrOH)]. The following alkanols (HCl salt) are prepd.: VI (R' = H, X = CHOH) (Ar, n, R, and m.p. given): Ph, 1, Et, - (free base m. 111-11.8°) (iso-PrOH); Ph, 1, Pr, - (free base m. 94-6.4°) (iso-PrOH); Ph, 2, Me, 220-2° (MeOH); Ph, 2, Et, 181-2° (Me2CO); 4-MeC6H4, 2, Me, 187-8° (Me2CO); 4-MeOC6H4, 2, Me, 188.2-90.4° (Me2CO); 4-FC6H4, 2, Me, 201-2° (iso-PrOH); C4H3S, 2, Et, 150-1.5° (Me2CO); Ph, 3, Me, 198-9°; Ph, 3, Et, 173-6°; Ph, 3, Pr, 157-9° (EtOAc); 4-FC6H4, 3, Me, 199-200° (iso-PrOH); 4-FC6H4, 3, Et, 190.4-3.0°; Ph, 4, Me, - (free base m. 81.5-3.0°) (Me2CO); Ph, 4, Et, 132-3° (isoPrOH-EtOAc); Ph, 4, Pr, 104-8° (oxalate) (PrOH).

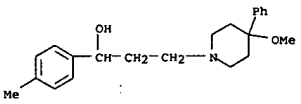
IT 94432-93-6P, 1-Piperidinepropanol, 4-methoxy-4-phenyl-α-2-thienyl-, hydrochloride 94876-62-7P, 1-Piperidinepropanol, 4-ethoxy-4-phenyl-α-2-thienyl-, hydrochloride 95160-16-0P, 1-Piperidinepropanol, 4-ethoxy-α,4-diphenyl-, hydrochloride 95160-17-1P, 1-Piperidinepropanol, 4-methoxy-4-phenyl-α-p-tolyl-, hydrochloride 95289-83-1P, 1-Piperidinepropanol, 4-methoxy-α,4-diphenyl-, hydrochloride 97017-68-0P, 1-Piperidinepropanol, α-(p-fluorophenyl)-4-methoxy-4-phenyl-, hydrochloride 97297-00-2P, 1-Piperidinepropanol, 4-methoxy-α-(p-methoxyphenyl)-4-phenyl-, hydrochloride
RL: PREP (Preparation)

L4 ANSWER 53 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



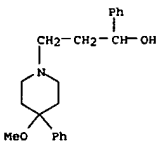
● HCl

RN 95160-17-1 CAPLUS
CN 1-Piperidinepropanol, 4-methoxy-4-phenyl-α-p-tolyl-, hydrochloride (7CI) (CA INDEX NAME)



● HCl

RN 95289-83-1 CAPLUS
CN 1-Piperidinepropanol, 4-methoxy-α,4-diphenyl-, hydrochloride (7CI) (CA INDEX NAME)

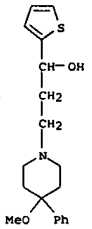


● HCl

RN 97017-68-0 CAPLUS
CN 1-Piperidinepropanol, α-(p-fluorophenyl)-4-methoxy-4-phenyl-, hydrochloride (7CI) (CA INDEX NAME)

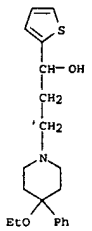
L4 ANSWER 53 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
(prepn. of)

RN 94432-93-6 CAPLUS
CN 1-Piperidinepropanol, 4-methoxy-4-phenyl-α-2-thienyl-, hydrochloride (7CI) (CA INDEX NAME)



● HCl

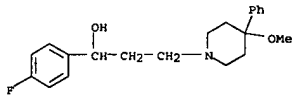
RN 94876-62-7 CAPLUS
CN 1-Piperidinepropanol, 4-ethoxy-4-phenyl-α-2-thienyl-, hydrochloride (7CI) (CA INDEX NAME)



● HCl

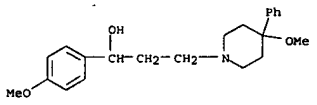
RN 95160-16-0 CAPLUS
CN 1-Piperidinepropanol, 4-ethoxy-α,4-diphenyl-, hydrochloride (7CI) (CA INDEX NAME)

L4 ANSWER 53 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



● HCl

RN 97297-00-2 CAPLUS
CN 1-Piperidinepropanol, 4-methoxy-α-(p-methoxyphenyl)-4-phenyl-, hydrochloride (7CI) (CA INDEX NAME)



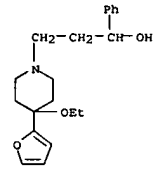
● HCl

L4 ANSWER 54 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1962:469128 CAPLUS
DOCUMENT NUMBER: 57:69128
ORIGINAL REFERENCE NO.: 57:13719c-i,13720a
TITLE: Chemistry and pharmacology of 4-alkoxypiperidines related to reversed esters of pethidine
AUTHOR(S): Casy, A. F.; Beckett, A. H.; Hall, G. H.; Vallance, D.
K.
CORPORATE SOURCE: Chelsea Coll. Sci. & Technol., London
SOURCE: J. Meal. Pharm Chem. (1961), 4, 535-52
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB Fifteen 4-alkoxy-1-(benzoylalkyl)-4-(2-furyl) piperidines and related compds. are prepared and tested for analgesic activity in comparison with 1-(2-phenethyl) analogs. The structure-action relationships are discussed in terms of the 4-oxygenated function, the 1-substituent and the 4-aryl group. The most active member of the series, 4-ethoxy-4-(2-furyl)-3-methyl-1-(2-phenethyl)piperidine, shows pharmacol. action resembling that of morphine. A mixture of 16.3 g. freshly prepared furan and LiPh (from 3.3 g. Li and 38 g. PhBr) is refluxed 2 hrs., cooled, treated with 37 g. 1-benzyl-4-piperidone in Et2O, stirred 10 min. at room temperature, cooled in an ice-bath, 40 g. Ac2O in Et2O added, stirred at room temperature, poured into ice and 40 ml. HOAc, stored at 5°, the precipitate washed with Et2O, aqueous NH3 added, extracted with Et2O, dried, solvent removed, the mixture neutralized carefully with HCl-EtOH giving 4-acetoxy-1-benzyl-4(2-furyl)piperidine-HCl (Ia), m. 152. Reaction of the crude ester with 2 moles HCl gives the 4-ethoxy analog of the HCl salt (I), m. 206. A mixture of 10 g. I in 150 ml. EtOH is shaken with 1 g. 10% Pd-C and H at room temperature and atmospheric pressure 10 hrs., filtered, and concentrated giving 4-ethoxy-4(2-furyl)piperidine-HCl, m. 149-50°. A mixture of the free base of the latter compound (1 g.), 1 g. 3-chloropropyl phenyl ketone and 20 ml. toluene and a trace of KI is refluxed 10 hrs., allowed to stand overnight, filtered, the filtrate extracted with aqueous HCl, the extract made basic with aqueous NH3, extracted with Et2O giving 1-(3-benzoylpropyl)-4-ethoxy-4-(2-furyl)piperidine-HCl, m. 170° (decomposition). The residue on the filter above (1.6 g.) is treated with 3.5 g. 2-dimethylaminoethyl phenyl ketone methiodide, and 1 g. Na2CO3 in 25 ml. dimethylformamide, dry N bubbled through the mixture 4 hrs., diluted with H2O, held at 5° overnight, the solvent decanted, the oil washed with H2O, dissolved in Et2O, dried, solvent removed giving 1-(2-benzoylethyl)-4-ethoxy-4-(2-furyl)piperidine (II), the HCl salt of which m. 171-2°. Prepared similarly is: 4-(2-furyl)-1,2,5,6-tetrahydropyridine-HCl, m. 231° (decomposition). II (1.7 g.) in Et2O is added to 0.4 g. LiAlH4 in Et2O, the mixture refluxed 1 hr., decomposed with H2O, filtered, dried, solvent removed giving 4-ethoxy-4-(2-furyl)1-(3-hydroxy-3-phenylpropyl)piperidine, the HCl salt of which m. 153.5°. 1-Benzyl-3-methyl-4-piperidone (80 g.) is added to cooled 2-furyllithium in ether prepared from 6.6 g. Li, 75.2 g. PhBr, and 35 ml. furan, the stirred mixt. treated with 80 ml Pr2O, refluxed 1 hr., poured onto ice and 80 ml. HOAc, the org. layer extd. with dil. HOAc, the aq. exts. made alk. with aq. NH3, the free base extd. with Et2O, dried, solvent removed giving 65 g. impure ester which is treated with 15.7 g. AcCl (dropwise) in 35 ml. Me2CO and 10 ml. EtOH, stored at 5 giving Ia, m. 141-1.5°. Prepd. similarly are: 4-(2-furyl)-3-methyl-4-piperidinol, m. 99 100°; 1-(2-benzoylethyl)-4-(2-furyl)-3-methyl-4-piperidinolHBr; 1-benzyl-4-ethoxy-4-(2-furyl)-3-methylpiperidineHCl, m. 167-8°; 1-(2-benzoylethyl)-4-ethoxy-4-(2-furyl)-3-methylpiperidine-HCl, m. 183°; and 1-(2-benzoylethyl)-4- ethoxy-4-(2-furyl)-3-methylpiperidine-HCl, m. 153°.

IT 96063-87-5P, 1-Piperidinepropanol, 4-ethoxy-4-(2-furyl)-α-phenyl-, hydrochloride
RL: PREP (Preparation)
(preparation of)

RN 96063-87-5 CAPLUS
CN 1-Piperidinepropanol, 4-ethoxy-4-(2-furyl)-α-phenyl-, hydrochloride (7CI) (CA INDEX NAME)



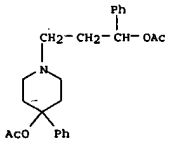
● HCl

L4 ANSWER 55 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1960:93267 CAPLUS
DOCUMENT NUMBER: 54:93267
ORIGINAL REFERENCE NO.: 54:17710g
TITLE: Compounds related to pethidine. IV. General chemical methods of increasing the analgesic activity of pethidine
AUTHOR(S): Janssen, Paul A. J.; Eddy, Nathan B.
CORPORATE SOURCE: Research Labs. Dr. C. Janssen, Beerse, Belg.
SOURCE: Journal of Medicinal & Pharmaceutical Chemistry (1960), 2(No. 1), 31-45
CODEN: JMPCAS; ISSN: 0095-9065
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

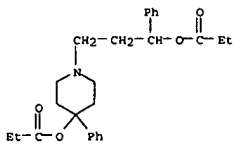
AB The influence of systematic chemical modifications on analgesic potency in mice and rats was estimated for a series of compds. related to pethidine.

IT 116606-71-4, 1-Piperidinepropanol, 4-hydroxy-α,4-diphenyl-, diacetate 124119-22-8, 1-Piperidinepropanol, 4-hydroxy-α,4-diphenyl-, dipropionate
(as analgesics)

RN 116606-71-4 CAPLUS
CN 1-Piperidinepropanol, 4-(acetyloxy)-α,4-diphenyl-, acetate (ester) (9CI) (CA INDEX NAME)



RN 124119-22-8 CAPLUS
CN 1-Piperidinepropanol, 4-(1-oxopropoxy)-α,4-diphenyl-, propanoate (ester) (9CI) (CA INDEX NAME)

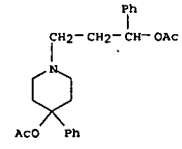


L4 ANSWER 56 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1960:93266 CAPLUS
DOCUMENT NUMBER: 54:93266
ORIGINAL REFERENCE NO.: 54:17710f-g
TITLE: The influence of photocatalytic conversion on the pharmacodynamic properties of ergot alkaloids. Adrenolytic effect and toxicity of lumiergotamine and lumiergocristine
AUTHOR(S): Eklund, L. H.
CORPORATE SOURCE: State Pharm. Lab., Stockholm
SOURCE: Svensk Farmaceutisk Tidskrift (1960), 64, 345-53
CODEN: SFTIAE; ISSN: 0039-6524
DOCUMENT TYPE: Journal
LANGUAGE: English

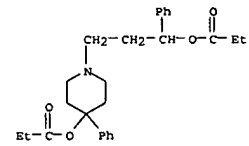
AB Lumiergotamine as well as lumiergocristine when compared with ergotamine showed decreased adrenolytic effect, and acute as well as subacute toxicity.

IT 116606-71-4, 1-Piperidinepropanol, 4-hydroxy-α,4-diphenyl-, diacetate 124119-22-8, 1-Piperidinepropanol, 4-hydroxy-α,4-diphenyl-, dipropionate
(as analgesics)

RN 116606-71-4 CAPLUS
CN 1-Piperidinepropanol, 4-(acetyloxy)-α,4-diphenyl-, acetate (ester) (9CI) (CA INDEX NAME)



RN 124119-22-8 CAPLUS
CN 1-Piperidinepropanol, 4-(1-oxopropoxy)-α,4-diphenyl-, propanoate (ester) (9CI) (CA INDEX NAME)

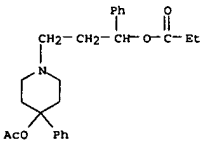


L4 ANSWER 57 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1960:39153 CAPLUS
DOCUMENT NUMBER: 54:39153
ORIGINAL REFERENCE NO.: 54:7742g-i,7743a-e
TITLE: Substituted 4-phenylpiperidines
INVENTOR(S): Pohland, Albert
PATENT ASSIGNEE(S): Eli Lilly & Co.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

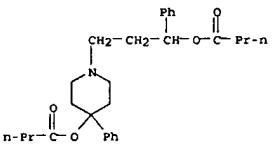
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 824607		19591202	GB 1958-7839	19580311

AB The title compds., PhCH(O2CR).(CH2)2.N[CH2CH2CH(O2CR)Ph].-CH2.CH2 where R
= Me, Et, or Pr, and their pharmaceutically acceptable salts, having analgesic properties, were prepared 4-Phenyl-4-hydroxypiperidine (23 g.), 6
g. paraformaldehyde (I). 15.7 g. MeCOPh, 4.8 g. anhydrous HCl and 120 ml. EtOH were refluxed 1 hr., cooled, 6 g. I added to the mixture and the mixture
refluxed an addnl. 16 hrs. The mixture was cooled to room temperature and EtOH
removed in vacuo. The residue was dissolved in H2O, made alkaline with 6N
NH4OH, extracted with C6H6 and the extract evaporated The residue was dissolved in
EtOAc and the solution saturated with HCl to precipitate 3-(4-phenyl-4-hydroxypiperidino)propiophenone-HCl (II), m. 190-1° (MeOH-EtOAc).
II (24 g.) was dissolved in H2O, the solution made alkaline with 6N NH4OH, extracted
with CHCl3-Et2O, and the extract dried and evaporated The residue was dissolved
in 100 ml. MeOH and the solution added in portions to a mixture of 8.8 g. NaBH4
and 300 ml. MeOH. After stirring 6 hrs. the MeOH was removed in vacuo, leaving crude solid 1-(3-phenyl-3-hydroxypropyl)-4-phenyl-4-hydroxypiperidine (III). Crude III was dissolved in 10% HCl solution, the
solution washed with Et2O, the Et2O layer discarded, and the acid solution made
alkaline with 6N NH4OH to separate a purified III which crystallized upon cooling
to 0°. A solution of III in EtOH was saturated with anhydrous HCl to precipitate
III.HCl (IV), m. 192-3° (MeOH-EtOAc). IV (15 g.), 100 ml. pyridine, and 35 ml. Ac2O was refluxed 1 hr., the mixture cooled, and the pyridine removed in vacuo. The residue was dissolved in H2O and made alkaline
with 6N NH4OH to give 1-(3-phenyl-3-acetoxypropyl)-4-phenyl-4-acetoxypiperidine (V) as an oil. A solution of V in Et2O was dried and saturated
with HCl to precipitate V.HCl.H2O, m. 160-1° (MeOH-EtOAc). Similarly prepared from IV and propionic and butyric anhydrides were 1-(3-phenyl-3-propionoxypropyl)-4-phenyl-4-propionoxypiperidine maleate, m. 110-11° (EtOAc-Et2O), and 1-(3-phenyl-3-butyroxypropyl)-4-phenyl-4-butyroxypiperidine maleate, m. 151-2° (EtOAc-Et2O).
4-Acetoxy-4-phenylpiperidine (6.2 g.), 9 g. PhCOCH:CH2 and 50 ml. C6H6 allowed to stand 12 hrs., the mixture cooled, 3.4 ml. Ac2O added, the mixture

L4 ANSWER 57 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
allowed to stand 0.5 hr. and poured into a soln. of 3.6 g. maleic acid (VI) in 200 ml. of ether to give 3-(4-acetoxy-4-phenylpiperidino)propiophenone maleate (VII), m. 112-14° (EtOAc-Et2O). VII (5.5 g.) was dissolved in 100 ml. abs. EtOH, 2 g. of 5%
Pd-C added, and mixt. hydrogenated at 40 lb.pressure. The catalyst was removed by filtration and the filtrate evapd. to dryness. The oily residue was dissolved in H2O, the H2O soln. was washed with Et2O to dry in
H2O, the H2O soln. was washed with Et2O and then made alk. with NH4OH. The liberated free base was taken up in Et2O, dried over MgSO4 and soln. treated with 1.4 g. VI to produce cryst.
3-(4-acetoxy-4-phenylpiperidino)-
1-phenyl-1-propanol maleate (VIII), m. 145-6° (Me2CO-Et2O). VIII (1.4 g.), 3 ml. (EtCO)2O, and 10 ml. pyridine were warmed on the steam bath 10 min., then allowed to stand at room temp. for 1 hr. The mixt. was
evapd. to dryness in vacuo, the residue was dissolved in H2O and the soln.
was washed with Et2O and then made alk. with NH4OH. The sepd. oil was extd. into Et2O, dried over MgSO4, and the dry soln. treated with 0.35 g. VI to produce 3-(4-acetoxy-4-phenylpiperidino)-1-phenyl-1-propionoxypropane maleate, m. 149-50° (Me2CO-Et2O).
IT 102895-55-6 108651-66-7 108651-67-8
112046-75-0 116606-71-4 116606-72-5
122174-63-4 122802-93-1 124119-23-9
(Derived from data in the 6th Collective Formula Index (1957-1961))
RN 102895-55-6 CAPLUS
CN Propionic acid, α-[2-(4-hydroxy-4-phenylpiperidino)ethyl]benzyl ester, acetate (6CI) (CA INDEX NAME)



RN 108651-66-7 CAPLUS
CN Butanoic acid, 3-[4-(1-oxobutoxy)-4-phenyl-1-piperidinyl]-1-phenylpropyl ester (CA INDEX NAME)

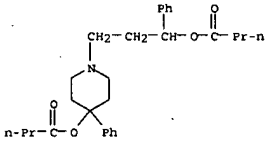


L4 ANSWER 57 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

RN 108651-67-8 CAPLUS
CN Butyric acid, diester with 4-hydroxy-α,4-diphenyl-1-piperidinepropanol, maleate (6CI) (CA INDEX NAME)

CM 1

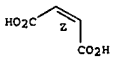
CRN 108651-66-7
CMF C28 H37 N O4



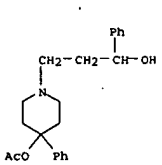
CM 2

CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.

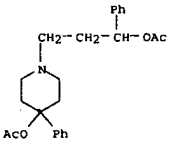


RN 112046-75-0 CAPLUS
CN 1-Piperidinepropanol, 4-hydroxy-α,4-diphenyl-, 4-acetate (6CI) (CA INDEX NAME)

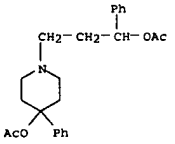


RN 116606-71-4 CAPLUS
CN 1-Piperidinepropanol, 4-(acetyloxy)-α,4-diphenyl-, acetate (ester) (9CI) (CA INDEX NAME)

L4 ANSWER 57 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 116606-72-5 CAPLUS
CN 1-Piperidinepropanol, 4-hydroxy-α,4-diphenyl-, diacetate, hydrochloride (6CI) (CA INDEX NAME)

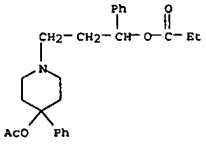


● HCl

RN 122174-63-4 CAPLUS
CN Propionic acid, α-[2-(4-hydroxy-4-phenylpiperidino)ethyl]benzyl ester, acetate, maleate (6CI) (CA INDEX NAME)

CM 1

CRN 102895-55-6
CMF C25 H31 N O4

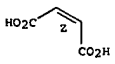


CM 2

CRN 110-16-7

L4 ANSWER 57 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
CMF C4 H4 O4

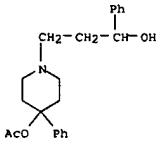
Double bond geometry as shown.



RN 122802-93-1 CAPLUS
CN 1-Piperidinepropanol, 4-hydroxy-α,4-diphenyl-, 4-acetate, maleate (6CI) (CA INDEX NAME)

CM 1

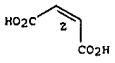
CRN 112046-75-0
CMF C22 H27 N O3



CM 2

CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.

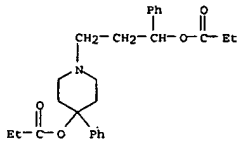


RN 124119-23-9 CAPLUS
CN Propionic acid, diester with 4-hydroxy-α,4-diphenyl-1-piperidinepropanol, maleate (6CI) (CA INDEX NAME)

CM 1

CRN 124119-22-8
CMF C26 H33 N O4

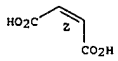
L4 ANSWER 57 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



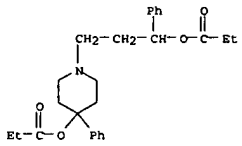
CM 2

CRN 110-16-7
CMF C4 H4 O4

Double bond geometry as shown.



IT 124119-22-8, Propionic acid, diester with 4-hydroxy-α,4-diphenyl-1-piperidinepropanol
(and other derivs.)
RN 124119-22-8 CAPLUS
CN 1-Piperidinepropanol, 4-(1-oxopropoxy)-α,4-diphenyl-, propanoate (ester) (9CI) (CA INDEX NAME)



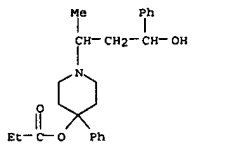
L4 ANSWER 58 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1960:23212 CAPLUS
DOCUMENT NUMBER: 54:23212
ORIGINAL REFERENCE NO.: 54:4623c-h
TITLE: 1-Aryl-3-(4-hydroxy-4-phenyl-1-piperidyl)-1-propanol derivatives
INVENTOR(S): Janssen, P. A. J.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 578395		19590530	BE	

AB β-(4-Hydroxy-4-phenyl-1-piperidyl)propiophenone (I), m. 134-5°, is prepared by refluxing 18 h. 212 g. 4-hydroxy-4-phenylpiperidine-HCl, 144 g. acetophenone, and 780 cc. iso-PrOH with 2 successive portions of 37.5 g. paraformaldehyde. 1-Phenyl-3-(4-hydroxy-4-phenyl-1-piperidyl)-1-propanol (II), m. 174-5° (iso-PrOH), is prepared by adding 3.78 g. NaBH4 to a stirred solution of 61.9 g. I in 800 cc. EtOH, adding subsequently 5N HCl solution and evaporating the solution in vacuo the base is liberated and dissolved in CHCl3, then dried and distilled; II.HCl, m. 191-2°. The following products have similarly been prepared (using A for the 4-hydroxy-4-phenyl-1-piperidyl group): β-(A-substituted)-m-methylpropiophenone, m. 133.4-4.8°; β-(A-substituted)-p-tert-butylpropiophenone-HCl, m. 206-8°; (β-A-substituted)-m-methoxypropiophenone-HCl, m. 105-6.8°; β-(A-substituted)-3,4-dimethoxypropiophenone-HCl, m. 210.5-3°; β-(A-substituted)-p-chloropropiophenone-HCl, m. 190-1.5°; β-(A-substituted)-p-fluoropropiophenone-HCl, m. 207.5-9.5°; β-(4-propionoxy-4-phenyl-1-piperidyl)butyrophenone; 1-(m-methylphenyl)-3-(A-substituted)-1-propanol, m. 139-40.5°; 1-(m-methoxyphenyl)-3-(A-substituted)-1-propanol, m. 144.5-5.5°; 1-(p-chlorophenyl)-3-(A-substituted)-1-propanol, m. 167-9°; 1-phenyl-3-(4-propionoxy-4-phenyl-1-piperidyl)-1-butanol-HCl; 1-phenyl-1-acetoxy-3-(4-propionoxy-4-phenyl-1-piperidyl)butane-HCl; 1-phenyl-1-acetoxy-3-(4-acetoxy-4-phenyl-1-piperidyl)propane, m. 103-5° (HCl salt m. 156-7°); 1-phenyl-1-propionoxy-3-(4-propionoxy-4-phenyl-1-piperidyl)propane, m. 55.5-7.5° (HCl salt m. 77-80°). 1-Phenyl-3-(4-phenyl-1-piperidyl)-1-propene-HCl, m. 177-80°, is prepared by refluxing during 5 h. a stirred mixture of 76.3 g. cinnamyl chloride, 76.3 g. 4-phenyl-1,2,3,6-tetrahydropyridine, 213 g. Na2CO3, 3 g. KI, and 1.6 l. BuOH. After cooling, the mixture is filtered and concentrated The residue is dissolved in iso-Pr ether and treated by gaseous HCl. The base is liberated, and extracted with Et2O, the solution dried and distilled, the residue dissolved in 370 cc. AcOH and treated by gaseous HBr at 15° during 9 h., then left overnight at room temperature to yield 1-phenyl-1-bromo-3-(4-bromo-4-phenyl-1-piperidyl)propane-HBr, m. 160-2°. Treatment by NaOH provides II.

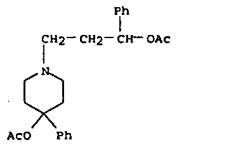
IT 114278-11-4 116606-71-4 116606-72-5
(Derived from data in the 6th Collective Formula Index (1957-1961))
RN 114278-11-4 CAPLUS
CN Propionic acid, 1-(3-hydroxy-1-methyl-3-phenylpropyl)-4-phenyl-4-piperidyl

L4 ANSWER 58 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)
ester, hydrochloride (6CI) (CA INDEX NAME)

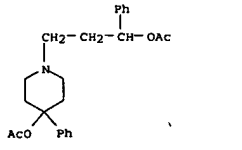


● HCl

RN 116606-71-4 CAPLUS
CN 1-Piperidinepropanol, 4-(acetyloxy)-α,4-diphenyl-, acetate (ester) (9CI) (CA INDEX NAME)



RN 116606-72-5 CAPLUS
CN 1-Piperidinepropanol, 4-hydroxy-α,4-diphenyl-, diacetate, hydrochloride (6CI) (CA INDEX NAME)



● HCl

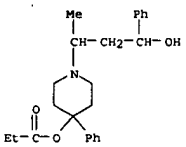
L4 ANSWER 59 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1960:23211 CAPLUS
DOCUMENT NUMBER: 54:23211
ORIGINAL REFERENCE NO.: 54:4623b-c
TITLE: Biocidal 3-acylamino-4H-1,2,4-triazoles
INVENTOR(S): Hardy, Wm. B.; Hosler, John F.
PATENT ASSIGNEE(S): American Cyanamid Co.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2914536		19591124	US 1957-697769	19571121

AB Title compds., useful as herbicides and fungicides, were prepared by the standard method of treating 3-amino-4H-1,2,4-triazole (I) with polychlorinated or monomethoxylated acyl chlorides in the presence of pyridine. Prepared were: 3-trichloroacetamido-4H-1,2,4-triazole, decompose 293-4°, good yield; 3-methoxyacetamido-4H-1,2,4-triazole, white powder, m. 234-5° (EtOH); and 3-(α,α,β-trichloropropionamido)-4H-1,2,4-triazole, decompose 220-6°. Title compds. were much more effective than I against radish seeds and the fungi Sclerotinia fructigena and Stemphylium sarcinaeforme.

IT 114278-11-4 116606-71-4 116606-72-5
(Derived from data in the 6th Collective Formula Index (1957-1961))

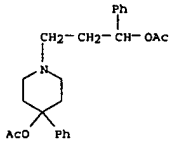
RN 114278-11-4 CAPLUS
CN Propionic acid, 1-(3-hydroxy-1-methyl-3-phenylpropyl)-4-phenyl-4-piperidyl ester, hydrochloride (6CI) (CA INDEX NAME)



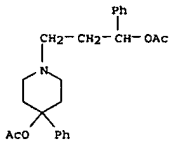
● HCl

RN 116606-71-4 CAPLUS
CN 1-Piperidinepropanol, 4-(acetyloxy)-α,4-diphenyl-, acetate (ester) (9CI) (CA INDEX NAME)

L4 ANSWER 59 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)



RN 116606-72-5 CAPLUS
CN 1-Piperidinepropanol, 4-hydroxy-α,4-diphenyl-, diacetate, hydrochloride (6CI) (CA INDEX NAME)



● HCl

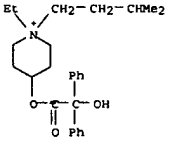
L4 ANSWER 60 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1958:66293 CAPLUS
DOCUMENT NUMBER: 52:66293
ORIGINAL REFERENCE NO.: 52:11958f-i
TITLE: Quaternary salts of piperidyl esters
INVENTOR(S): Papa, Domenick
PATENT ASSIGNEE(S): Schering Corp.
DOCUMENT TYPE: Patent
LANGUAGE: Unavailable
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 788126		19571223	GB 1955-27732	19550929

AB New compds. are listed of the type, PhR(HO)CCO2C5H9NR'R''Y in which R is Ph, cyclopentenyl, cyclohexenyl, cyclopentyl, or cyclohexyl, R' and R'' are alkyl groups containing 1-6 C atoms, and Y is a pharmaceutically acceptable anion. These compds. are selective antispasmodics and inhibit a segment of the parasympathetic system associated with gastric acidity and motility. Prepns. cited include N-methyl-4-piperidyl benzilate, m. 162-3°; methiodide, m. 199-200°; N-ethyl-4-piperidyl benzilate, m. 81-3°, methiodide, m. 168-70°; N-methyl-4-piperidyl benzilate methobromide, m. 237-8°; N-methyl-4-piperidyl benzilate methyl methosulfate, ethobromide, and isopropiodide; N-ethyl-4-piperidyl benzilate butobromide and isoamiodide; N-methyl-4-piperidyl phenylcyclopentylglycolate, b1-3 170-1°, and methiodide. The N-ethyl or N-propyl-4-piperidinols give the N-substituted esters and quaternary salts. Also described are N-methyl-4-piperidyl phenylcyclohexenylglycolate and methiodide; N-methyl-4-piperidyl phenyl-Δ1-cyclopentenylglycolate and methiodide; N-methyl-4-piperidyl phenyl-Δ1-cyclohexenylglycolate and methiodide, and N-methyl-4-piperidyl phenyl-Δ2-cyclohexenylglycolate and methiodide.

IT 124179-28-8P, Piperidinium, 1-ethyl-4-hydroxy-1-isopentyl-, iodide, benzilate
RL: PREP (Preparation)
(preparation of)

RN 124179-28-8 CAPLUS
CN 1-Ethyl-4-hydroxy-1-isopentylpiperidinium iodide, benzilate (6CI) (CA INDEX NAME)



● I⁻

L4 ANSWER 60 OF 60 CAPLUS COPYRIGHT 2008 ACS on STN (Continued)

```
=>

=> d his

     (FILE 'HOME' ENTERED AT 11:53:10 ON 30 JAN 2008)

     FILE 'REGISTRY' ENTERED AT 11:53:20 ON 30 JAN 2008
L1              STRUCTURE UPLOADED
L2            0 S L1
L3          251 S L1 FULL

     FILE 'CAPLUS' ENTERED AT 11:54:02 ON 30 JAN 2008
L4           60 S L3 FULL

=> log y
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                         ENTRY    SESSION
FULL ESTIMATED COST                                     328.92     507.49

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                         ENTRY    SESSION
CA SUBSCRIBER PRICE                                     -48.00     -48.00

STN INTERNATIONAL LOGOFF AT 11:56:08 ON 30 JAN 2008
```